

*Research Article***Knowledge, Attitude and Practice of Mothers Towards Postpartum Family Planning in Minia District, Egypt**

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Abstract

Background: Postpartum contraception reduces the risk of unintended and rapid repeat pregnancies. A comprehensive postpartum family planning (PPFP) service can enable women make adequate and informed choices on a preferred contraceptive method, initiating a method as well as encouraging them to use that method for a period depending on their reproductive intentions. **Methods:** A cross-sectional study, with a total of 550 women were recruited; 261 of them were recruited from Eastern and Western Family Health Centers and 289 were recruited from Demsheer and Damarees Health Units during the period from October 2017 to March 2018. **Results:** The main source of knowledge of PPFP methods were health care (HC) providers (40.4%) for rural women, however (40.1%) of urban women had their knowledge from their relatives. It showed that (35.6%) of rural women used PPFP without any problem, while (49.8%) of urban women didn't like to use. The prevalence of postpartum contraceptive use was (50.2%) for urban women who used mainly oral pills (36.2%), where it was (72.7%) for rural ones who used mainly injectables (41.4%). **Conclusions:** Suboptimal rate of postpartum modern contraceptive use were found in the study area. Therefore, strengthening FP counseling during antenatal and postnatal care visits are crucial steps to enhance modern contraceptive use among postpartum mothers.

Key words: Mothers - Knowledge - Attitude - Practice - Postpartum Family Planning - Minia - Egypt

Introduction

PPFP is the initiation of FP services within six weeks following childbirth to prevent closely spaced and unintended pregnancies. The postpartum period or puerperium starts about an hour after the delivery of the placenta and includes the following six weeks (Hale et al., 2014). Globally, 225 million women have an unmet need for FP, resulting in 54 million unintended pregnancies, 16 million unsafe abortions and 79000 maternal deaths annually. The promotion of FP in countries with high birth rates has the potential to avert (32%) of all maternal deaths and nearly (10%) of childhood deaths. Effective use of postpartum and post-abortion family planning is an obvious way in which progress towards this goal could be achieved (Cleland et al., 2006). The aim of the FP Program is to help each family in fulfilling their reproductive intentions and to have the desired number of children; this can be achieved with the use of contraceptives (El-Shazly et al., 2015). Short interval pregnancies are associated with increased maternal

morbidity such as anemia, bleeding disorders, premature rupture of membranes, puerperal endometritis and mortality (Conde-Agudelo et al., 2000).

These serious problems could be avoided by the use of an effective FP method within the immediate or extended postpartum period up to one year. Spacing pregnancies at least two years apart in the developing world could reduce maternal mortality by more than (40%) and under five mortality by (31%) (Cleland et al., 2012). The main reason for short birth intervals is that many women in developing countries do not use contraception after birth and therefore are likely to become pregnant once fecundity returns. An analysis of DHS data from more than 20 countries showed that although very few postpartum women want another child within two years, only (40%) are using FP in the extended postpartum period (Sonalkar et al., 2015). Population growth in Egypt continues to be high. Recent increase in total fertility predicts more future increase.

This increase could be attributed to many factors include having unmet need for contraception. Urgent steps are required to make contraception more widely available, accessible and affordable. Egyptian Demographic & Health Survey (EDHS) always reports data onto unmet need for FP among total number of married women in the reproductive age but it gives no data about such estimate for post-partum women (Elweshahi et al., 2018). One major challenge facing policy-makers and program managers is how to support women in achieving healthier birth intervals, especially in rural areas due to various factors. Women who decide to seek contraceptive services before resumption of menstruation are sometimes driven away by HC providers to come when menses resume (Brunie et al., 2013). These providers advise mothers to delay contraceptive use until their menses return. Consequently, many young women tend to use modern contraception only after resumption of sexual intercourse or return of menses exposing them to the dangers of unintended pregnancy (Ndugwa et al., 2011).

Subjects and method

Study design and population: This study is a descriptive cross-sectional study conducted among married women in childbearing period (18-45 years) during their postpartum period in Minia district. The study population were recruited from four health centers in Minia District; two urban (Eastern and Western Family Health Centers) and two rural (Demsheer and Damarees Health Units). These centers were chosen by a stratified random sample; firstly Minia District was chosen randomly from the nine districts of Minia Governorate, then Eastern and Western Family Health Centers were chosen as the urban health centers and Demsheer and Damarees are Health Units were chosen randomly from the eight accredited Rural Health Units of Minia district. The Inclusion criteria: married women aged (18-45) during their postpartum period (1-40) days visiting either Eastern or Eastern Family Health Centers or Demsheer or Damarees Health Units during the period from October 2017 to March 2018.

Data collection tool: A structured interview questionnaire was designed to assess the knowledge, attitude and practice of the recruited women from these health centers. The questionnaire was prepared in English and then translated into Arabic

Results

it was found that more than half of the total participants (50.4%) were in the age group 18-25 years, most of them are resident in the rural areas (54.3%). The mean age of participants was 26.4 years (SD= 5.5). The mean age of urban women was 26.8 years (SD=5.6), while the mean age of rural women was 25.9 years (SD=5.4) it was found that (28%) were illiterate and (40.1%) of them live in rural areas in comparison to (14.6%) of illiterate women are resident in urban areas. More than half of respondents (53.1%) have secondary education, and most of them are resident in urban areas (67.4%), while (7.5%) of respondents have university degree and live in urban area (9.2%) table (1)

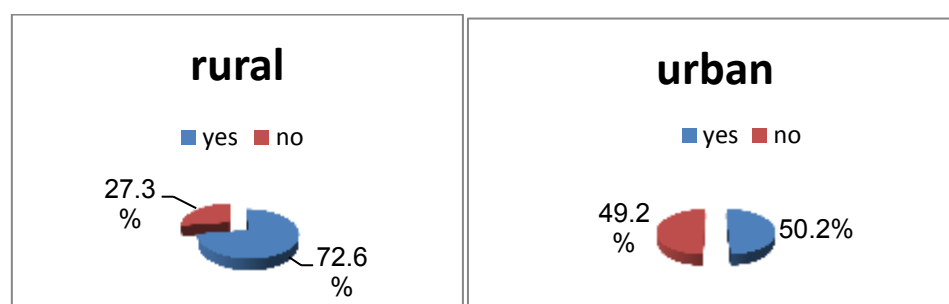
Postpartum mothers using postpartum contraception in urban areas were (50.2%), while postpartum mothers using postpartum contraception in the rural area were (72.6%) figure (1).

It was found that knowledge about postpartum contraception among postpartum mothers was higher in rural areas (77.2%) than in urban areas (52.5%). The most known method to be used during postpartum period among mothers in rural areas was IUD (39.9%). The most common source of knowledge about postpartum contraception among postpartum mothers were health care providers (35%) table (2).

About (38%) of participants preferred not using postpartum contraception and (49.8%) of them were resident in urban areas. Postpartum mothers with partners who agreed to allow them to use contraception were (98.3%) and most of them (99.6%) live in urban areas table (3)

Table (1) Socio-demographic characteristics of studied postpartum mothers

Socio-demographic characteristics	Urban (n=261)	Rural (n=289)	Total (n =550)	Sig.*
Age groups				X^2 (Df) =5.6 (2)
(18 - 25) years	120 (46%)	157 (54.3%)	277 (50.4%)	$P = 0.061$
(26 - 35) years	117 (44.8%)	117 (40.5%)	234 (42.5%)	t (Df) = 1.9
(36 - 45) years	24 (9.2%)	15 (5.2%)	39(7.1%)	$P = 0.054$
Mean \pm SD	26.8 \pm 5.6	25.9 \pm 5.4	26.4 \pm 5.5	
Education of mothers				X^2 (DF)=56.6(4)
Illiterate	38 (14.6%)	116 (40.1%)	154 (28%)	$P < 0.001$
Read and write	17 (6.5%)	27 (9.3%)	44 (8%)	
Primary	6 (2.3%)	13 (4.5%)	19 (3.5%)	
Secondary	176 (67.4%)	116 (40.1%)	292 (53.1%)	
University	24 (9.2%)	17 (5.9%)	41 (7.5%)	

**Figure (1) Contraception usage of studied postpartum mothers****Table (2) Knowledge about postpartum contraception available methods among the studied women**

Item	Urba (n =261)	Rural (n =289)	Total (n =550)	Sig.*
Knowledge				
Yes	137 (52.5%)	223 (77.2%)	360 (65.5%)	X^2 (Df) =36.9
No	124 (47.5%)	66 (22.8%)	190 (34.5%)	$P = 0.001$
Known methods (n=360)				X^2 (Df) =50
IUD	47 (34.3%)	89 (39.9%)	136 (37.8%)	$P = 0.001$
Pills	25 (18.2%)	87 (39%)	112 (31.1%)	
Condom	16 (11.7%)	29 (13%)	45 (12.5%)	
Implanone	28 (20.4%)	6 (2.7%)	34 (9.4 %)	
Sterilization of wife	21 (15.3 %)	12 (5.4 %)	33 (9.2 %)	
Source of knowledge (n=360)				
Friends	34 (24.8%)	72 (32.3%)	106 (29.4%)	X^2 (Df) =19.6
Relatives	55 (40.1%)	54 (24.2%)	109 (30.3%)	$P = 0.001$
HC provider	36 (26.3%)	90 (40.4%)	126 (35%)	
Media	8 (5.8%)	3 (1.3%)	11 (3.1%)	
Internet	4 (2.9%)	4 (1.8%)	8 (2.2%)	

Table (3): Attitude towards postpartum contraception usage among the studied women

Item	Urban (n=261)	Rural (n =289)	Total (n =550)	Sig.*
Attitude				
Used without any problem	62 (23.8%)	103 (35.6%)	165 (30%)	X^2 (Df) =29.5 $P = 0.001$
Used in spite of problems	69 (26.4%)	107 (37%)	176 (32%)	
Don't like to use	130 (49.8%)	79 (27.3%)	209 (38%)	
Talking about postpartum family planning with partners				
Yes	253 (96.9%)	280 (96.9%)	533 (96.6%)	X^2 (Df) =0.001 $P = 0.974$
No	8 (3.1%)	9 (3.1%)	17 (3.1%)	
Partners agree (n=533)				
Yes	252 (99.6%)	272 (97.1%)	524 (98.3%)	X^2 (Df) =4.8 $P = 0.028$
No	1 (0.4%)	8 (2.9%)	9 (1.7%)	

Discussion

This study showed that the mean age of the participants was 26.4 years and there was a different level of education between urban and rural women; Out of the 550 respondents, (28%) were illiterate located more in the rural area with (40.1%). More than half of respondents with (53.1%) had secondary education located more in the urban with (67.4%), while (7.5%) of respondents went to university were from urban area with (9.2%). These results differ with a study that was done in Assiut and Souhag governorates on 450 participants where the rate of illiteracy was (38.4%), those who had completed secondary education or held a University degree accounted for (36.2%) of the sample, while those who could read/write or had primary or preparatory education accounted for (24.9%) of the sample (Mahmoud, 2015).

The result of the study showed that (65.5%) of the respondents were aware of at least one modern method of contraception that can be used after delivery and this is in agreement with a study in Ethiopia on 556 participants which reported that (68.2%) of the respondents were aware of modern methods of postpartum contraception (Nigussie, et al., 2016), and this differ from a study in India on 500 postpartum and post-abortal women which reported that (70%) of the respondents were aware of modern methods of contraception that can be used after delivery (Nath, et al., 2014). Another study in Safdarjung in India on 1200 patients reported that (72%) of the respondents were aware of postpartum contraception methods (Gupta, et al., 2017)

In this study, the main source of knowledge of family planning methods for women were HC providers (35%), followed by relatives (30.3%), and this is in agreement with a study conducted in India on 500 patients which reported that main source was HC providers with (25%) followed by relatives (20%) as a source of knowledge (Nath, et al., 2014), and this differ from a study in India on 404 women as friends occupied the main source of knowledge with (25%) followed by school with (18%) as a source of knowledge (Sharma, et al., 2017). Another study in Odisha on 240 women found that husband (48.3%) was the major source of information followed by media (28.7%) as a source of knowledge (Roy, et al., 2017).

The IUD (37.8%) was the most known method of postpartum contraception in our study followed by pills (31.1%), then condoms (12.5%) and finally implants (9.5%), and this differs from the findings in GDHS (Ghana Demographic Health Survey) 2014 as male condom was the most mentioned modern contraceptive (Cleland, et al., 2014), as well as another study conducted in the Nkwanta district of the Volta region in Ghana on 130 patients found that injectables were the best known method (Eliason, et al., 2014).

The study showed the attitude of respondents towards PPF was (30%) of women used without any complaints, (32%) of women used inspite of problems and finally (38%) of women didn't like to use contraception, and this differ from a study in Nepal on 400 women which reported that (68.50%) of women had positive

attitude towards PFP and were ready to use it when needed or if appropriate methods available, while (22.50%) women did not want to use any FP methods and (9%) women did not show any response or were unsure of using contraceptives (Bajracharya, 2015) as well a study in India on 404 participants reported that (64.6%) felt the need for spacing of 2 or 3 years between pregnancies, (65.8%) were not willing to adopt any method even when taught about it, while (28.2%) were willing to adopt a modern method and (6%) women were not sure (Sharma, et al., 2017).

This study found that the prevalence of modern contraceptive use among women in the postpartum period was (61.8%) and this differ from a study in Malawi on 383 postpartum women which reported that (74.6%) of women currently using postpartum contraception (Bwazi, et al., 2014) as well a study conducted in town of Gondar in Ethiopia on 703 women found that (48.4%) of postpartum women recently started using modern methods following delivery (Abera, et al., 2015).

This study found the most common used PFP methods were pills and DMPA with equal percent (38.8%), followed by IUD with (18.8%) and finally implanon with (3.5%) of postpartum mothers, and this differ from a study in northern Ethiopia on 601 women which reported the most widely used method was DMPA with (59.7%) followed by implants with (24.7%) and pills with (12.0%) among postpartum women (Abraha, et al., 2017), as well a study in Jos, North Central Nigeria on 405 women which reported Implants with (19.2%) and injectables with (18.4%) as the most used methods between participants (Ujah, et al., 2017).

This study found that most common reasons for postponing PFP usage were waiting menses development with (36.7%) between mothers, followed by hardness to get the method with (26.7%) among mothers, then using breast feeding with (22.4%) of mothers and finally fear of side effects with (14.3%) of mothers, this is in agreement with a study in Gondar town in Ethiopia on 703 participants which reported that the commonest reason was waiting for menses development with (49.3%) of mothers, followed by travel of husband with (16.8%) of mothers, then fear of side effects with (7.7%) of mothers (Abera, et al., 2015),

and differ from a study in Talensi District on 280 participants which found that opposition from husbands to access the service with (90%) of participants and misconceptions about FP methods with (83%) of participants were reported as a major reasons against usage of FP services (Apanga, et al., 2015),

This study showed that respondents who had counseling about contraception side effects were (98%), and this differ from a study in USA on 1656 women which reported that (58%) of women were counseled on bleeding patterns to expect and (67%) were offered counseling on potential side effects (Nelson, et al., 2018), as well as a study in New York which reported that (90%) of respondents had a discussion about contraceptive experience and side effects (Jaccard, et al., 2013).

The study showed that the most common FP methods the health care providers advised the respondents with were IUD among (64.8%) of mothers, followed by implanon and DMPA with equal percent (12.5%) of mothers, then pills among (9.5%) of mothers and finally sterilization of wife with (0.6%) of mothers, this is in agreement with a study done in Saudi Arabia on 65 women reported that most common methods told by health care providers were IUD among (20%) of respondents, followed by COC among (18.5%) of respondents, then minipill among (16.9%) of respondents, withdrawal among (15.4%) of respondents, fertility awareness among (12.3%) of respondents and male condom among (10.8%) of respondents (Bamufleh, et al., 2017), and this differ from a research in Ghana on 91 women reported that (33%) of respondents had recommendation to use IUD (Rupley, et al., 2015).

This study showed that the commonest causes of changing the FP method were husband refusal among (35.6%) of respondents, followed by absence of female doctor from the health unit among (32.8%) of respondents and finally fear of side effects among (31.6%) of respondents, and this differ from a study in Italy on 500 women reported that concern about side effects was present among (24%) of respondents followed by respondents partner vasectomy by (10%) of respondents (Johnson, et al., 2013) as well as a research in Malawi on 634 women which revealed that most of

respondents (93%) switched to an equally or more effective method during subsequent surveys (Kopp, et al., 2017).

Conclusion

The main source of knowledge regarding PPF methods were family members. The most commonly used method was oral pills. The most common reason for postponing PPF was waiting for menses development. Education level of mothers was a stable positive predictor for postpartum family planning usage, while husband education was inversely associated with PPF usage.

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