

Barriers affecting utilization of family planning services among rural Egyptian women

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العوائق التي تواجه الاستفادة من خدمات تنظيم الأسرة لدى النساء الريفيات المصريات إخلاص محمد التومي، نبيلة السيد طه صبوله، آمال عطية حسين

الخلاصة: تتمثل العوامل الرئيسية التي تضمن الاستفادة من طُرُق منع الحمل في مصر ومواصلة الاستفادة منها في إمكانية الوصول إلى خدمات تنظيم الأسرة، وجودة الرعاية، والتعرُّف على العقبات الرئيسية أمام الانتفاع بالخدمات. وقد أجرت الباحثات هذه الدراسة للتعرُّف على العقبات التي تؤثر على الانتفاع من خدمات تنظيم الأسرة، وعلى خصائص النساء اللاتي يتوقفن عن استخدام تلك الخدمات، وأولئك اللواتي لا يستخدمنها أصلاً. وهي دراسة وصفية مستعرضة، قامت الباحثات خلالها بانتقاء عشوائي متعدد المراحل لثمانية من مراكز صحة الأسرة في محافظة المنوفية في مصر، ثم انتقين عينة مقصودة من 500 امرأة ريفية متزوجة في سن الإنجاب تتوافر فيهنّ المعايير المطلوبة (منهن 109 امرأة لم يستخدمن خدمات تنظيم الأسرة و391 امرأة انقطعن عن استخدامها). واتضح للباحثات أن العوائق المعرفية هي التي ذُكرت من قِبَل أكثر من 55% من المشاركات في كلتا المجموعتين، وأن العوائق الثقافية هي المسؤولة لدى 44% من المشاركات في كلتا المجموعتين. أما العوائق المتعلقة بالطرق والأساليب فقد ذُكرت من قِبَل 33.8% من اللواتي انقطعن عن استخدام خدمات تنظيم الأسرة، كما ذُكرت العوائق الجغرافية من قِبَل 39.4% من النساء اللاتي لم يستخدمنها أصلاً.

ABSTRACT 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. We conducted this study to explore the barriers affecting utilization of FP as well as the characteristics of women who discontinue using FP and non-users of the FP services. A descriptive cross-sectional research design was used. A multistage random selection of 8 family health centres in Menoufia Governorate, Egypt was done. We selected a purposive sample of 500 married, rural women of reproductive age who fulfilled the required criteria (109 non-users, 391 discontinued). Cognitive barriers were cited by more than 55% of the participants in both groups and cultural barriers by 40% of both groups. Barriers related to the method were cited by 35.8% of the women who had discontinued, and demographic barriers by 39.4% of the non-users.

Obstacles influant sur l'utilisation des services de planification familiale par des femmes égyptiennes en milieu rural

RÉSUMÉ L'accès à la planification familiale, la qualité des soins et l'étude des obstacles à l'utilisation des services sont des facteurs clés pour l'adoption durable de la contraception en Égypte. Nous avons mené une étude pour passer en revue les obstacles influant sur l'utilisation de la planification familiale ainsi que sur les caractéristiques des femmes qui cessent d'avoir recours à ces services ou ne les utilisent pas. Nous avons choisi de mener une étude descriptive transversale. Dans le gouvernorat de Menoufia (Égypte), huit centres de santé familiale ont été sélectionnés par échantillonnage aléatoire à plusieurs degrés. Nous avons sélectionné un échantillon par choix raisonné de 500 femmes mariées en âge de procréer, vivant en milieu rural et répondant aux critères requis (109 non-utilisatrices, 391 anciennes utilisatrices). Dans les deux groupes, des obstacles cognitifs ont été mentionnés par plus de 55 % des participantes et des obstacles culturels par 40 % des participantes. Les obstacles liés à la méthode étaient en cause pour 35,8 % des anciennes utilisatrices tandis que les obstacles démographiques concernaient 39,4 % des non-utilisatrices.

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Received: 14/09/11; accepted: 10/24/11

Introduction

A woman's ability to space and/or limit her pregnancies has a direct impact on her health and well-being as well as on the outcome of each pregnancy [1]. Family planning (FP) is a major contributing factor towards child survival and reduction in maternal mortality. The relevance of FP in any strategy for safe motherhood and child survival is undeniable [2].

More than 100 million women in the less-developed countries, about 17 % of all married women, would prefer to avoid pregnancy, but are not using any form of FP. Unmet need for contraception can lead to unintended pregnancies, i.e. either unwanted or mistimed, which poses risks for women, their families and society. In the less-developed countries, about one-fourth of pregnancies are unintended [3].

Global population stabilization is dependent upon success in reducing obstacles to universal availability of quality contraception and FP services. Previous research into the barriers to FP service use has highlighted the importance of looking beyond physical access to examining barriers that arise from psychosocial, administrative, cognitive and cultural factors as well as physical barriers and barriers related to the method itself [4].

In Egypt a baby is born every 23.5 seconds [5]. This means an increase of some 3 680 people every day. At this rate, the population is increasing by almost 112 200 every month. In 2000 alone, the population rose by more than 1.3 million [5]. In January 2001, 64.6 million people were living in Egypt [5]. The population had risen to 78.7 million in May 2008 [6]. According to surveys from 2007 and 2008, the total fertility rate is 3.1 children/woman, unplanned births reached 17% and unmet need for family planning is 10% [6,7].

According to Egyptian MOH statistics [unpublished report. Health Affairs

Province, Family Planning Administration, Menufia Governorate, 2009], fertility has shown some increase in Egypt in the recent years, but contraceptive use remains low. Also, the FP programme has failed to implement many of the recommendations of the 1994 Conference on Population and Development [8], which sought to solve the population problem through reproductive health services and empowerment of women through encouraging youth to contribute proactively to the development programmes [9].

The decision to use or not to use FP services is the product of a number of demographic and service-related barriers. Policy-makers and programme managers can strengthen FP programmes by understanding and using data on unmet need, considering the characteristics of women and couples who have unmet needs, and working to remove obstacles that prevent individuals from choosing and using a FP method [10].

Significant to the study, the rate of normal births in Menufia Governorate increased during the 5 years from 2003 to 2008. Data from 2008 indicated that the utilization rates of FP services are decreasing and the natural increase rates are increasing from 2002 until 2007 [Unpublished report, Health Affairs Province, Family Planning Administration, Menufia Governorate, 2008]. The decrease in the utilization of birth control methods contributes to the rapid increase of population by about 2 million/year [11].

The aim of the study was to explore the various types of reported barriers for both the discontinued and the non-users women.

Methods

We used a descriptive, cross-sectional, exploratory study design. The study was conducted using a multistage random selection technique in Tala district, Menufia governorate, Egypt. From a

total of 27 units, 8 Family Health Units were randomly selected. These units serve 19 villages, 330 579 people. Remote areas were also considered in the study setting.

A survey was made of married women of reproductive age (15–45 years) who were registered on the Family Statistical Register at the selected rural health units as non-users of FP or had previously been users and had discontinued. The register contains names, addresses, jobs, marital status; and woman's status of using or not using a family planning method, health status and telephone number of all family members. Continuation of using or not using FP is not constant, however 1228 women were identified in the registers in the 8 health units at the time of the study. A purposive sample of half of those women was made ($n = 614$). The selected women were approached in their homes through the rural community leader and invited to participate in the study. The selection criteria were: women who had stopped using FP methods (discontinued) and women who had never used any FP method. Exclusion criteria were: women who stopped using FP because their husbands were working abroad, women who had had a hysterectomy and women who were pregnant. A total of 560 women agreed to participate. Out of these, 60 refused to participate in the study, leaving a final study sample of 500.

The sample was divided into 2 groups: Group 1 was 109 women who had never used an FP method (non-users); Group 2 was 391 women who had been users in the past (discontinued).

Participants were interviewed at the Family Health Units. Those women who could not get to the health units for any reason were interviewed at their homes. The women were interviewed by the researchers who had attended a standardized training session at the Faculty of Nursing at Menufia University to ensure the quality and standardization

of the interviews. Data were collected on 2 days per week over a period of 8 months from September 2008 to April 2009.

Data collection

A modified version of the *Family Planning Evaluation Interviewing Questionnaire* (8 items) was used. This was developed by the Ministry of Health and Population and is used at all government clinics and rural units.

The tool comprises 2 forms. The first was used to collect information on the women's characteristics such as age, duration of marriage, age at marriage, education, husband's education reproductive history, and data about FP utilization.

The second form was designed by the researchers from the literature review and was validated by 2 experts in the field of community health nursing and 2 experts of obstetric and gynaecology nursing. It contains a checklist regarding intention to have children in the future, intention to use FP in the future and barriers/reasons for stopping or not using FP services. It has questions on 9 types of barrier:

- cognitive (did not hear or see any advertisement about FP in last 6 months/did not participate in an educational session about FP during last 6 months/think that FP is good behaviour in a woman's life),
- cultural (have bad belief about FP, e.g. loop can penetrate the heart, injection can cause infertility, pills can cause cancer/ child-bearing is more comfortable at a younger age/non traditional methods of FP can harm the woman's health/presence of a male physician prevent women from being investigated/reluctance to discuss sexual behaviour and problems with male physicians/ideal number of children),
- demographic (desire to have children because of low parity/FP should be used only for older women who do

not want children/difficulty becoming pregnant/),

- barriers related to the method itself (desire to have the most effective method/have failed in using FP methods and causes of this failure/method used induced serious side-effects such as severe pain in chest or abdomen, severe headache, severe depression, severe bleeding),
- reproductive (absence of intercourse/long intervals between intercourse/side-effects such as bleeding, spotting or amenorrhoea),
- psychosocial (someone bans you from using FP, e.g. husband, mother-in-law, self),
- physical (engaged in activities throughout the day/distance to clinic is long),
- medical barriers such as requiring women to return more often than necessary for check-ups, requiring spouse's consent as a prerequisite for prescribing contraception, requiring woman to be on her period to start hormonal or IUD methods)
- administrative barriers such as poor quality of service, previous bad experience with the facility, service provider's attitude, lack of privacy during examinations, shortage of stock, etc.

Woman could select any number of barriers. Response was recorded as agree or disagree. Agree scored 1 and represents a barrier: the higher the score the more barriers there are. Disagree scored 0 and represents no barrier. Scoring was adjusted for some specific questions for which disagreement represented a barrier and vice versa; in these cases agree scored 0 and disagree scored 1.

A multiple choice evaluation sheet developed by the Ministry of Health and Population in 2008 was completed only by participants who had had previous contact with an FP clinic but had discontinued using FP. This was used to evaluate participants' satisfaction about the delivered service. It consisted of 2

parts: the first part had 5 statements and was used to assess the characteristics of the waiting area and the waiting time to see a doctor. The second part concerned women's satisfaction with the service rendered to them.

For statistical analysis we used SPSS, version 13. Statistical significance was set at $P < 0.05$

Results

Regarding attitudes to contraceptive use, 75% of the women who were non-users said they intended to use FP in the future and 81% of the women who had discontinued using FP intended to use it in the future (Table 1).

When asked about timing of their future use, only 32.3% of the non-users said they intended to use FP within 1 year compared with 51.1% of those who had discontinued using FP (Table 1).

The distribution of each barrier for both groups of women is illustrated in Table 2. The main barriers for the 2 groups were cognitive followed by cultural. Barriers related to the method were reported only by the discontinued women (35.8%). The third most common response for the non-users was demographic barriers (39.4%).

Multiple regression analysis showed that cultural, reproductive and demographic barriers were statistically significant factors that affect non-use or discontinuing use of FP (Table 3). Physical and administrative barriers were the least significant predictors.

Table 4 shows the relationship between the reported barriers to using FP services and demographic characteristics of the non-users. We found that 46 of the 77 non-users aged 21–30 years reported cognitive barriers (59.7%) and 33 reported cultural barriers (42.8%). Age at marriage was significantly related to both reproductive and medical barriers ($P < 0.05$). Duration of marriage was significantly related to demographic

Table 1 Attitude of the 2 groups of participants, non-users ($n = 109$) and women who had discontinued use of family planning (FP) methods ($n = 391$), in regard to future use of contraception

Attitude/intention	Non-users of FP ($n = 109$)		Discontinued using FP ($n = 391$)		χ^2	P
	No.	%	No.	%		
Intend to have children in future	56	51.4	140	35.8		
Intend to use FP in future	31	28.4	225	57.5	35.64	0.0001
Will not use in future	22	20.2	26	6.7		
Intended timing for using FP in future	($n = 31$)		($n = 225$)			
Within 1 year	10	32.3	115	51.1	3.16	0.076
More than 1 year	21	67.7	110	48.9		

*Significant at $P < 0.05$.

and medical barriers ($P < 0.05$). Cognitive barriers were reported by 63.6% of the 66 women who were married for less than 5 years, and

Table 5 presents the relationship between reported barriers to continuation of FP services and the demographic characteristics of the women who had discontinued use. There was a significant relationship between age and both cognitive barriers and barriers related to the method. There was also a significant relationship between age at marriage and both physical and cognitive barriers.

Discussion

According to MOH statistics, around 8 in 10 married women in Egypt wanted no additional children or wanted to delay the next birth for at least 2 years, yet a sizeable proportion did not use

contraception [12]. The gap between stated preference and actual behaviour is a measure of what demographers label "unmet need". Also, more than half the women with unmet need indicated that they intended to use FP but were unable to do so [13].

It has been proposed that the proportion of those who intend to use FP in the future is a better measure of demand for contraception than unmet need itself [unpublished report, Health Affairs Province, Family Planning Administration, Menufia Governorate, 2009]. In this study, the majority of the non-users of FP and the women who had discontinued use said they intended to have children and intended to use FP methods in the future. These findings presented a discrepancy between what the women want and what they really do. This could be because many

Egyptian women want to have greater control over reproductive decisions, but they lack the knowledge and need proper counselling.

It has been reported that behaviour change goes through the following stages: knowledge, approval, intention, use, and advocacy [14,15]. Such findings could explain that women's intention reflects their ability to respond to health education sessions about contraception according to whether their needs are met.

Barriers to use and discontinuation of contraception

The present study explored the various types of reported barriers for both the discontinued group and the non-users. Cognitive, cultural and demographic barriers were the main barriers that lead to not using/discontinuation of FP

Table 2 Reported barriers for discontinuation/not using family planning (FP) services among non-users of FP methods ($n = 109$) and women who had discontinued using FP ($n = 391$)

Barrier	Non-users of FP		Discontinued using FP	
	No.	%	No.	%
Cognitive	61	56.0	216	55.5
Cultural	44	40.4	163	41.7
Related to method itself	0.0	0.0	140	35.8
Reproductive	4	3.7	130	33.2
Demographic	43	39.4	103	26.3
Medical	10	9.2	80	20.5
Psychosocial	22	20.2	78	19.9
Physical	2	1.8	56	14.3
Administrative	17	15.6	40	10.2

Table 3 Multiple regression analysis of reported barriers for discontinuing/not using family planning services among a group of 500 married women in Menufia Governorate, Egypt

Barrier	B	SE	P	Exp (B)	95% confidence interval for Exp (B)
Reproductive	2.535	0.285	0.0001	0.079	0.045–0.139
Demographic	2.372	0.774	0.002	0.398	0.227–0.699
Cultural	0.981	0.264	0.0001	2.667	1.589–4.476
Psychosocial	0.523	0.325	0.107	0.593	0.314–1.120
Related to method itself	0.483	0.261	0.065	0.617	0.370–1.030
Medical	0.102	0.320	0.749	0.903	0.482–1.692
Administrative	0.039	0.416	0.925	0.961	0.426–2.172
Cognitive	0.035	0.256	0.892	0.966	0.584–1.596
Physical	0.024	0.371	0.949	0.977	0.472–2.023

B = logistic regression coefficient; SE = standard error of B; Exp (B) = estimated odds ratio.

methods followed by barriers related to the method itself and reproductive barriers. The administrative and physical barriers were the least reported ones. This contradicts findings from studies in Nepal and in Jordan, where the researchers related the hesitation to seek out FP services to administrative barriers, which included problems in the health-care delivery system and perceptions of health-care providers, especially their FP counselling skills [16,17]. In addition, a study in Pakistan found that half of all urban poor women identified psychosocial reasons as the primary barrier to using family planning services. Administrative barriers were the second most commonly reported barrier, with few women reporting cognitive and physical barriers to FP service use [18]. This could be attributed to subjective perceptions about the barriers and varies from one person to another according to cultural and personal characteristics and the quality of service itself.

The majority of women in both groups in our study thought that FP was good behaviour for a woman's life. However, about half had not heard or seen any advertisement about FP in the previous 6 months. This reported lack of awareness about contraceptive methods may be a reason for not using contraception among our participants. This is supported by a survey in Sub-Saharan Africa which indicated lack of

media exposure as a prominent reason, cited by most of the women reviewed in the survey [19].

A large proportion of the 2 groups of women in our study said they would refuse to discuss sexual behaviour and problems with a male physician. This means that most Egyptian women preferred a female physician. This situation is not unique to Egypt, it is found also in Jordan [17].

Concerning barriers related to the method itself, more than half of the women who had discontinued using contraception had a desire to have a more effective method. In Indonesia, however, only 8% of discontinued women related it to the method [20]. This could be due to past experience of failure of the method or the presence of side-effects. This is supported by Aktun et al. who reported that among women using contraception, the majority of unintended pregnancies occurred as a result of inconsistent or incorrect use of the method [21].

Reproductive barriers were reported by almost one-third of the discontinued women but only 3% of the non-users. This is mainly subjective and depends on previous experience with FP methods.

Around two-thirds of the women in both groups reported that no-one prevented them from using FP. This means that the women felt powerful enough

to make their own decisions and have the autonomy to decide for themselves. This was confirmed in another study in Egypt in which only 1% of discontinuation of the last contraceptive method was related to the husband's disapproval [22]. In contrast, a study carried out in Pakistan reported that psychosocial barriers, which included husband's opposition and religious opposition, accounted for half of the reported barriers to FP service use [18].

Regarding medical barriers, about one-third of the non-users and more than three-quarters of the discontinued women had been told to come back at a later date while they were menstruating. Our findings are supported by evidence from Ghana, Kenya, Cameroon, Jamaica, and Senegal indicating that non-menstruating women are commonly told they must return when they are menstruating in order to be given a hormonal contraceptive method or to have an intra-uterine device (IUD) inserted [23]. One rationale offered to justify these requirements is that it is cheap and there is no need to do pregnancy tests. A second rationale is that hormonal methods reduce menstrual disturbances when initiated during menstruation, and the IUD is easier to insert at this time. However, this is irrelevant for many women, and inserting IUDs in non-menstruating women offers other benefits, including better diagnosis of

Table 4 Relationship between reported barriers to using family planning (FP) services and demographic characteristics for non-users of FP methods (n = 109)

Characteristic	Demographic (n = 43)				Reason for not using family planning				Cognitive (n = 61)		Cultural (n = 44)		Medical (n = 10)	
	No.	%	No.	%	Administrative (n = 17)	Psychosocial (n = 22)	Physical (n = 2)	Reproductive (n = 4)	No.	%	No.	%	No.	%
Age (years)														
< 21 (n = 10)	6	60.0	1	10.0	2	20.0	0	0.0	7	70.0	2	20.0	1	10.0
21-30 (n = 77)	26	33.8	12	15.5	15	19.4	1	1.3	46	59.7	33	42.8	7	9.0
31-40 (n = 19)	9	47.3	3	15.8	5	26.3	1	1.3	7	36.8	8	5.2	2	5.2
> 40 (n = 3)	2	6.6	1	33.3	0	0.0	0	0.0	1	33.3	1	33.3	0	0.0
χ^2	4.238		0.955		1.226		1.606		8.583*		2.007		0.354	
P	0.237		0.812		0.747		0.658		0.035*		0.571		0.950	
Duration of marriage (years)														
< 5 (n = 66)	20	30.3	8	12.1	11	16.7	0	0.0	2	3.0	25	37.9	3	4.5
5-10 (n = 25)	14	56.0	7	28.0	7	28	2	8.0	2	3.0	12	48.0	4	16.0
11-15 (n = 11)	7	63.6	1	9.0	2	18.2	0	0.0	0	0.0	4	36.4	3	27.3
> 15 (n = 7)	2	28.5	1	14.2	2	28.6	0	0.0	0	0.0	3	42.9	0	0.0
χ^2	8.219*		3.890		1.788		6.846		2.088		0.866		8.126*	
P	0.042*		0.274		0.618		0.077		0.554		0.834		0.043*	
Age at marriage (years)														
< 20 (n = 34)	13	38.2	7	20.6	6	17.6	2	5.9	0	0.0	12	35.2	2	5.9
20-30 (n = 71)	28	39.0	9	12.7	14	19.7	0	0.0	3	4.0	31	43.6	7	9.8
31-40 (n = 3)	2	66.6	1	33.0	1	33.0	0	0.0	1	33.0	0	0.0	0	0.0
> 40 (n = 1)	0	0.0	0	0.0	1	100	0	0.0	0	0.0	1	100	1	100
χ^2	1.603		2.005		4.422		4.494		8.863*		4.192		10.685*	
P	0.659		0.571		0.219		0.213		0.031*		0.812		0.014*	

The number of family planning barriers may exceed the actual number of women in each group because the women may choose more than one barrier.

*Significant at P < 0.05.

Table 5 Relationship between reported barriers to continuation of use of family planning services and demographic characteristics of the women who had discontinued using family planning (n = 391)

Characteristic	Reason for discontinuing use of family planning methods																	
	Demographic (n = 103)		Administrative (n = 40)		Psychosocial (n = 78)		Physical (n = 56)		Reproductive (n = 130)		Cognitive (n = 216)		Cultural (n = 163)		Barriers related to method (n = 140)		Medical (n = 80)	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Age (years)																		
< 21 (n = 17)	6	35.2	0	0.0	4	23.5	4	23.5	7	41.1	6	35.2	10	58.8	7	5.9	5	29.4
21-30 (n = 169)	44	26.0	17	10.0	34	20.1	24	14.2	8	4.7	106	62.7	67	39.6	69	40.8	33	19.5
31-40 (n = 138)	38	27.5	19	13.7	29	21.0	18	13.0	40	28.9	68	49.2	54	39.1	51	36.9	31	22.5
> 40 (n = 67)	15	22.3	4	5.9	11	16.4	10	14.9	19	28.3	36	53.7	32	47.7	13	19.4	11	6.5
χ^2	1.672		5.148		0.761		1.380		3.979		8.609*		3.731		9.990*		1.941	
P	0.643		0.161		0.859		0.710		0.264		0.035*		0.292		0.019*		0.585	
Duration of marriage (years)																		
< 5 (n = 81)	20	1.2	7	1.2	20	24.6	14	17.3	25	30.8	43	53.1	32	39.5	35	43.2	23	39.5
5-10 (n = 124)	40	0.8	12	9.7	31	25.0	15	12.1	44	35.4	71	57.2	53	42.7	52	1.7	22	17.7
11-15 (n = 53)	14	26.4	6	11.3	7	13.2	10	18.8	22	41.5	31	58.4	25	47.1	129	35.8	14	26.4
> 15 (n = 133)	29	21.8	15	11.3	20	15.0	17	12.8	39	29.3	71	53.3	53	39.8	34	25.5	21	15.8
χ^2	3.715		0.491		6.639		2.229		3.256		0.768		1.055		10.029*		6.635	
P	0.294		0.921		0.084		0.526		0.354		0.857		0.788		0.018*		0.085	
Age at marriage (years)																		
< 20 (n = 178)	45	25.2	20	11.2	28	0.6	38	21.3	67	37.6	83	46.6	73	41.0	62	34.8	34	19.1
20-30 (n = 209)	58	27.7	19	9.1	45	21.5	16	7.6	61	29.1	132	63.1	89	42.5	78	37.3	45	21.5
31-40 (n = 3)	0	0.0	1	33.3	0	0.0	2	66.6	2	66.6	0	0.0	0	0.0	0	0.0	1	33.3
> 40 (n = 1)	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	1	100.0	1	100.0	0	0.0	0	0.0
χ^2	1.718		2.349		5.521		21.597*		5.122		15.150*		3.646		2.513		0.912	
P	0.633		0.503		0.137		0.0001*		0.163		0.002*		0.302		0.473		0.823	

The number of family planning barriers may exceed the actual number of women in each group because the women may choose more than one barrier.
*Significant at P < 0.05.

sexually transmitted infections and lower rates of infections and expulsion. The menstrual requirements pose a serious, but under-recognized, barrier to FP.

As for administrative barriers, about one fifth of our participants reported a fear of using the service due to reports of bad experiences by others. This is supported by the findings of 2 other studies where lack of acceptance of FP services was due to unsuitable regulations in the facility [24,25]. Administrative barriers could lead to dissatisfaction with the service and reluctance to use it and discontinuation.

Predictors for the future use of family planning services

We found that cultural barriers were the most significant barriers to future use of contraception, followed by reproductive and demographic barriers. Physical and administrative barriers were the least mentioned. This result is supported by Blank, Curtis and Croft who reported that many people discontinue use even though they do not want to get pregnant and thus expose themselves to the risk of unintended pregnancy due to cultural barriers, barriers related to the method and reproductive barriers [26]. Likewise, in a Pakistani study the most common reasons that women discontinued using contraception, other than desire for pregnancy, were becoming pregnant while using a contraceptive and side-effects or fear of side-effects

[18]. A survey in Asia and Latin America revealed that reproductive barriers were the second most frequently cited reason that fell under the rubric of health concerns, which weighed heavily in these regions [27].

Association between demographic characteristics & utilization of family planning among discontinued women

There was a significant relationship between current age, age at marriage, woman's education and husband's education, and both cognitive barriers and barriers related to the method. Similarly, the education status of both the woman and her husband displayed significant positive relationships with a woman's propensity of utilizing FP services in a study in Pakistan [18].

Relationship between reported barriers to using FP services and demographic characteristics of non-users

Age was significantly related to reproductive barriers and three-quarters of the non-users were 21–30 years old. Duration of marriage was significantly related to demographic barriers. These findings are reasonable since they relate to the desire to start a family early in the marriage and they are young and less experienced in using FP methods. This finding emphasizes the lack of essential knowledge about FP and these women need specific attention and

more information to promote their safety and to avoid unintended pregnancy. This result is supported by other researchers [28] who emphasized that this age group lacks reassurance about what methods promote overall safety and reduce risks. Hassanein reported that 39% of women in his study were married at age 20–24 years and never used FP services [29]. Women who indicated that they are not using contraception because they do not know about contraceptive methods, could be unfamiliar with specific methods of contraception or could lack an awareness of the concept of family planning or fertility control [30].

Acknowledgements

We would like to express our gratitude to the Manager of Family Planning of the Health Affairs Province, the Manager of the Medical Facility of Management and the Manager of Family Planning at the Medical Facility of Management, Tala District. We also wish to thank the nurses and women who helped through data collection.

This paper is derived from the MSc thesis of E.M. Eltomy, while studying at Menoufia University under the supervision of Dr N. Saboula and Dr A. Hussien in the Department of Community Health Nursing.

Competing interests: None declared.

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