

Family planning counseling sessions at primary health care facilities in Sadat city, Egypt

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ABSTRACT

Background: Family planning (FP) is now acknowledged as one of the most successful development interventions, with potential benefits on maternal and child health (MCH) outcomes, educational advances, and economic development. **Objectives:** The aim of the study was to assess the performance of health-care providers during FP counseling sessions and assess clients' satisfaction with these sessions at the studied primary health-care facilities. **Materials and Methods:** This was a cross-sectional study was conducted in family health facilities in Sadat city, Egypt, including all FP services providers in the studied family health facilities using a balanced counseling strategy (BCS) checklist and self-reported questionnaire to assess the qualification of providers in providing FP counseling and the availability of services and resources. The study included also 200 clients that were randomly selected from attendants to the studied facilities for FP services to assess their satisfaction regarding the counseling session. **Results:** There was significant difference between physicians and nurses regarding performance of FP counseling sessions where nurses showed better performance than physicians in all steps of the checklist. There was also a significant difference between physicians and nurses regarding the duration of experience, previous FP counseling training courses. Total satisfaction score was better among clients attending rural facilities. **Conclusion:** BCS gave better scores for nurses than for physicians in providing counseling sessions for clients.

KEY WORDS: Family Planning; Counseling; Patient Satisfaction


INTRODUCTION

To overcome the problem of overpopulation, the family planning (FP) program in Egypt has started as early as February 1966 which was aiming to help family to have a suitable number of children, help mothers to have pregnancies within the safest childbearing period, and post pone pregnancy for required period when indicated for medical and social purposes.^[1]

FP helps women preserve their health and fertility and also contributes to improving the overall quality of their lives as it allows them to control the number and spacing of their births.^[2] It has been documented that perinatal outcomes and child survival can be improved mainly by lengthening interpregnancy intervals.^[3] Economic growth is achieved through reduced strain on environmental resources (land, food, and water) and community resources (health care, education) and allowing greater participation by individuals in community affairs.^[4]

FP counseling is interaction between clients and providers. In the ideal client-provider interaction (CPI), the provider treats all clients respectfully, responds to their reproductive needs and intentions, help in the selection of the most appropriate FP method, and offers sufficient information to use the method safely and effectively.^[5] Clients are more likely to be satisfied

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with services if all staff, not only the counselor, treats them with respect and friendliness. Client satisfaction is associated with improved use-effectiveness and continuation.^[6] The use of audiovisual aids and contraceptive samples is important to help the client to better understand her chosen method. During the counseling session, use of posters, flipcharts, illustrated booklets, and sample contraceptives help the client to remember key information and remind the provider to discuss important points.^[7] In the health communication, there has been an increased focus on the concept of shared decision-making, which lies between the two poles of informed choice and directive counseling. Prioritizing patient autonomy in the choice of a method (informed choice) and the desire to encourage women to use highly effective methods (directive counseling).^[8]

The decision-making process is seen as a process of bringing these two areas of expertise together, with the health-care provider having superior knowledge of the medical information and the client being the expert regarding her own values and preferences.^[9]

Ensuring that women have all necessary information about side effects can assist them both with method selection, and method continuation as intolerance of contraceptive side effects is a common reason for discontinuation of contraceptive methods. Providers must be prepared to respectfully address specific concerns that women may have about side effects and risks of contraceptive methods.^[10] In addition, making follow-up visits may help patients switch between methods or using emergency contraception to protect them against pregnancy.^[11]

Balanced counseling strategy (BCS) was developed to improve CPI in FP provision. The BCS is a practical, interactive, client friendly counseling strategy that uses three key job aids (visual memory aids) for counseling clients about FP, an algorithm (decision tree) a set of counseling cards on different contraceptive methods, and corresponding brochures on each of the methods. BCS is divided into three counseling stages which are pre-choice, method choice, and post-choice stages.^[12]

Objectives

The aim of the study was to assess the performance of health-care providers during FP counseling sessions and assess clients' satisfaction with these sessions at the studied primary health-care facilities.

MATERIALS AND METHODS

A cross-sectional study was conducted in family health facilities in Sadat city, Menoufia governorate - Egypt. The study was conducted in the context of time frame of

12 months. (Starting from the 1st of March 2015 till the end of March 2016).

The study protocol was approved by the Ethics Committee of Faculty of Medicine, Menoufia University, and an official permission letter was obtained and directed to the administrators in the studied primary care facilities. Communication was also made with the health unit directors to inform them about the objectives and procedures of the study to get their cooperation and facilitation throughout its practical aspect. Written consent was obtained from all participants after simple and clear explanation of the research objectives.

Sampling

The study conducted at family health units and centers ($n = 15$) in Sadat district, Menoufia governorate. Five were located in urban areas (one center and 4 units), and ten were in rural areas (two centers and 8 units).

The study included all FP services providers in the studied family health facilities. The total number was 45 providers; 21 of them are physicians, and 24 are nurses.

Study Design

Data from health-care providers were collected using a checklist and self-reported questionnaire. The checklist was used to assess the quality of FP counseling sessions through attending the sessions, record number of attendants, and fill the following items using BCS stages according to the United States Agency for International Development (USAID) user's guide 2008^[12] which included three stages:

Pre-choice stage

It included 4 Steps: Warm relationship, rule out pregnancy, set all of the counseling cards, and set aside non-suitable cards after knowing (reproductive goals, breastfeeding, past problem with a method, partner support, and condom use).

Method choice stage

It included 3 Steps: Information about methods not set aside, asking client to choose method and using brochure to exclude non-advised condition.

Post-choice stage

It included the Following Steps: Inform client about chosen method, referral and back up method if needed, complete the counseling session, and invite return and thank for visiting.

In addition, a questionnaire was constructed to assess the qualification of providers in providing FP counseling and services and also to assess the availability of resources it

included questions about duration of experience, previous FP training courses, previous FP counseling training courses, availability of refreshing training courses, availability of job aids (cards, brochures, and algorism).

Availability of FP methods (IUD/loop, pills, injections, male condom, and implanon), availability of infrastructure (waiting area, area for examination, and clean latrines), availability of equipment (ultrasound, sphygmomanometer, stethoscope, equipments for loop insertion, autoclave, gloves, gowns, and goggles), availability of infection prevention (running water, liquid soap, alcohol rub, disposable towels, educational posters, safety boxes, correct antiseptic techniques, non-touch technique in loop insertion).

In addition, 200 clients were randomly selected from attendants to the studied family health units and centers for FP services during the period of data collection (10-20 clients from each family facility). They were subjected to a semi-structured questionnaire to assess clients' satisfaction regarding the FP counseling sessions they received, it included questions about the effect of counseling sessions on choosing method, availability of FP provider, sufficient information taken about each method, availability of FP methods, availability of job aids (cards, brochures), and waiting time.

Statistical Management of the Collected Data

The data were tabulated and analyzed by SPSS (statistical package for social science) version 20 on IBM compatible computer (SPSS Inc., Chicago, IL, USA).

Two types of statistics were done:

- Descriptive statistics (e.g., percentage [%], mean [x] and standard deviation [SD]),

- Analytic statistics: Which include the following tests: Chi-square test (χ^2): Was used to study association between two qualitative variables. Fisher exact test: For comparison between two independent groups qualitative variables with one cell <5 . F-test: For comparison between more than two independent quantitative variables. $P < 0.05$ was considered statistically significant.

RESULTS

The study included 21 physicians and 24 nurses providing the FP services in the studied primary care facilities; there was a significant difference between physicians and nurses regarding the duration of experience as 58.3% of nurses had more than 10 years' experience; however, 71.4% of physician had <5 years' experience (Table 1).

There was also a significant difference between physicians and nurses regarding previous FP counseling training courses and last course taken as 100% of nurses received counseling training courses versus 38.1% of physician (Table 1).

There was a significant difference between physicians and nurses regarding performance of FP counseling sessions using BCS checklist where nurses showed better performance than physicians in all steps of the checklist (Table 2).

There was no significant difference between urban and rural facilities regarding availability of non-human resources except for job aids (cards, brochures, and algorism) and running water that were more available in rural facilities ($P = 0.039, 0.045$, respectively) and implanon which was available only in urban facilities ($P = 0.003$) (Table 3).

Table 1: Comparison between providers of family planning services regarding their practice and training

Practice and training of family planning providers	Physician <i>n</i> =21 (%)	Nurses <i>n</i> =24 (%)	Total <i>n</i> =45(%)	χ^2	<i>P</i> value
Duration of practice of providers in years					
<5	15 (71.4)	5 (20.8)	20 (44.4)	12.5	0.002
5-10	3 (14.3)	5 (20.8)	8 (17.8)		
>10	3 (14.3)	14 (58.3)	17 (37.8)		
Previous family planning training courses					
Yes	20 (95.2)	24 (100)	44 (97.8)	1.2*	0.28
No	1 (4.8)	0 (0)	1 (2.2)		
Previous family planning counseling training courses					
Yes	8 (38.1)	24 (100)	32 (71.1)	20.9	<0.001
No	13 (61.9)	0 (0)	13 (28.9)		
Availability of refreshing training courses					
Sufficient	8 (38.1)	14 (58.3)	22 (48.9)	3.5	0.172
Not sufficient	11 (52.4)	10 (41.7)	21 (46.7)		
Not available	2 (9.5)	0 (0)	2 (4.4)		

*Fisher exact test

Table 2: Assessment of the performance of family planning counseling among the studied health-care providers

Steps of family planning counseling	Physician n=21 (%)	Nurse n=24 (%)	Total n (%)	Chi-square	P value
Warm relationship	21 (100)	24 (100)	45 (100)	-	-
Rule out pregnancy	15 (71.4)	23 (95.8)	38 (84.4)	5.1	0.024
Set all the counseling cards	2 (10)	10 (71.7)	12 (26.7)	5.9	0.015
Ask about reproductive goals	1 (4.8)	13 (54.2)	14 (31.1)	12.8	<0.001
If ask Breast feeding	1 (4.8)	13 (54.2)	14 (31.1)	12.8	<0.001
Ask about past problem	1 (4.8)	13 (54.2)	14 (31.1)	12.8	<0.001
Ask about partner support in condom use	0 (0)	9 (37.5)	9 (20)	9.8	0.002
Give information about methods not set a side	7 (33.3)	23 (95.8)	30 (66.7)	21.4	<0.001
Ask client to choose	12 (57.1)	23 (95.8)	35 (77.8)	9.7	0.002
Use a brochure to exclude non advised condition	5 (23.8)	14 (58.3)	19 (42.2)	5.5	0.019
Inform client about chosen method	21 (100)	23 (95.8)	44 (97.8)	0.895	0.344
Give method	21 (100)	23 (100)	45 (100)	-	-
Complete counseling session	21 (100)	23 (100)	45 (100)	-	-

Table 3: Availability of non-human resources for family planning services in the studied family health facilities

Non-human resources	Urban n=20 (%)	Rural n=25 (%)	Total n=45 (%)	Fisher exact	P value
Availability of job aids (cards, brochures, and algorithm)					
Sufficient	15 (75)	24 (96)	39 (86.7)	4.2	0.039
Not sufficient	5 (25)	1 (4)	6 (13.3)		
Availability of family planning methods					
IUD	20 (100)	25 (100)	45 (100)	-	-
Pills	20 (100)	25 (100)	45 (100)	-	-
Injection	20 (100)	25 (100)	45 (100)	-	-
Male condom	20 (100)	25 (100)	45 (100)	-	-
Sub dermal implant	6 (30)	0 (0)	6 (13.4)	8.7	0.003
Availability of infrastructure					
Waiting area	19 (95)	22 (88)	41 (91.1)	0.672	0.412
Area of examination	20 (100)	25 (100)	45 (100)	-	-
Clean latrine	18 (90)	23 (92)	41 (91.1)	0.06	0.815
Availability of equipment's					
Ultrasound	16 (80)	16 (64)	32 (71.1)	1.4	0.239
Sphygmomanometer	20 (100)	25 (100)	45 (100)	-	-
Stethoscope	20 (100)	25 (100)	45 (100)	-	-
For loop insertion	20 (100)	25 (100)	45 (100)	-	-
Autocalve	19 (95)	25 (100)	44 (97.8)	1.3	0.258
Gloves	20 (100)	25 (100)	45 (100)	-	-
Gowns	14 (70)	23 (92)	37 (82.2)	3.7	0.06
Goggles	16 (80)	21 (84)	37 (82.2)	0.122	0.727
Availability of infection prevention					
Running water	17 (85)	25 (100)	42 (93.3)	4.02	0.045
Liquid soap	20 (100)	24 (96)	45 (100)	0.8	0.366
Alcohol rub	12 (60)	17 (68)	29 (64.4)	0.31	0.577
Disposable towels	15 (75)	16 (64)	31 (68.9)	0.627	0.428
Educational posters	20 (100)	25 (100)	45 (100)	-	-
Safety box	20 (100)	25 (100)	45 (100)	-	-
Correct antiseptic techniques	20 (100)	25 (100)	45 (100)	-	-
Non touch loop insertion	19 (95)	21 (87.5)	40 (90.9)	0.743	0.389

As regard clients' satisfaction about the counseling session they received; Clients in rural area showed significantly higher satisfaction score (14.05 ± 1.9) than those in urban area (13.2 ± 1.7), however, no significant difference between them regarding effect of counseling session on choosing the method, availability of FP providers, availability of FP methods, sufficient information taken, and the duration of the counseling session (Table 4).

DISCUSSION

This study revealed that (71.4%) of physicians included in the study had experience <5 years and 58.3% of nurses had experience for more than 10 years. There was a significant difference between physicians & nurses regarding training courses about counseling where 100% of nurses versus 38.1% of physicians received counseling training courses. In addition, there was a significant difference between urban and rural facilities regarding availability of job aids (cards, brochures, posters, and algorithm), where those were sufficient in 75% of urban facilities and in 96% of rural facilities. About 27% of the studied providers (71.7% of nurses versus only

10% of physicians) used the counseling cards for all family planning methods. Regarding Satisfaction of clients about family planning counseling sessions, the present founded that by interviewing of 200 clients about 85% of the clients were satisfied with the counseling sessions (52.5%, 32% for fair and good counseling session, respectively).

A study conducted by Mersal and Keshk^[13] in maternal and child health (MCH) centers in Egypt found that 55.2% of nurses had experience from 5 to 15 years and Abdel-Tawab and Roter study^[14] in Egypt found that 90% of physicians were in practice for <7 years. This comes in parallel to our results; may be due to same circumstances and regulations regarding primary care in Egypt. The results of El-Zeiny et al. study^[7] in Alexandria, Egypt, are disagreed to our finding as they found that the majority of both physicians (72%) and nurses (93.3%) attended training courses about family planning counseling. This may trigger a recommendation to offer more training courses for primary care physicians in the studied region. Our results are not matched with the findings of a survey in Tanzania^[15] and Mersal and Keshk study,^[13] who found that counseling sessions, in which providers discussed

Table 4: Satisfaction of clients about FP counseling sessions in studied primary health-care facilities

Clients' satisfaction	Urban n=70 (%)	Rural n=130 (%)	Total n=200 (%)	χ^2	P value
Effect of the counseling session					
Positive	55 (78.6)	106 (81.5)	161 (80.5)	0.017	0.89
Availability of FP providers all the time					
Yes	68 (97.1)	126 (96.9)	194 (97)	2.4	0.309
No	1 (1.4)	0 (0)	1 (0.5)		
Sometimes	1 (1.4)	4 (3.1)	5 (2.5)		
Sufficient information taken					
0 no	8 (11.4)	14 (10.8)	22 (11)	3.1	0.214
1 yes	27 (38.6)	38 (29.2)	65 (32.5)		
2 to some extent	35 (50)	78 (60)	113 (56.5)		
Availability of FP methods					
Available	70 (100)	130 (100)	200 (100)	-	-
Availability of job aids					
Available	70 (100)	130 (100)	200 (100)	-	-
Duration of counseling session					
<5 min	32 (45.7)	57 (43.8)	89 (44.5)	4.3	0.234
5-15 min	31 (44.3)	47 (36.2)	78 (39)		
15-30	5 (7.1)	22 (16.9)	27 (13.5)		
>30	2 (2.9)	4 (3.1)	6 (3)		
Rating the received counseling session					
Poor	18 (25.7)	13 (10)	31 (15.5)	17.06	<0.001
Fair	39 (55.7)	66 (50.8)	105 (52.5)		
Good	13 (18.6)	51 (39.2)	64 (32)		
Total satisfaction score					
Mean±SD	13.2±1.7	14.05±1.9	13.7±1.9	3.2	0.002
Range	10-18	10-21	10-21		

SD: Standard deviation, FP: Family planning

and demonstrated more than one method were (83.1, 82.3%, respectively). In addition, Crigler *et al.* study^[16] reported that in Nigeria, the percentage of providers who explained all FP methods to the clients was only (36.9%). On the contrary to our findings, a study in Tanzania^[15] found that one-half (49%) of all sites visited did not have FP signs or posters about family planning. This may be due to the difference in resources available for family planning services in both countries. El-Zeiny *et al.* study^[7] that was conducted on 120 clients 90% of them were satisfied by the counseling sessions. A study in Ecuador^[17] found that over 80% of the clients were satisfied with the services they received. Simbar *et al.* study^[18] which was conducted in urban health centers found that 83% of clients was satisfied with the counseling sessions. These findings are in agreement with our results. On the contrary, an Egyptian study^[14] found that the clients were less satisfied with FP counseling as only (65%) of the clients were satisfied with the services they received. This may be attributed to different model of communication, as physician centered counseling was predominant among their studied sample.

Standardized checklist developed by USAID and including all the primary care facilities in the studied city was the main strength points in our study. Limitation of the study was that family planning counseling in the studied facilities was conducted by either physicians or nurses who differ from each other regarding qualification and experience.

CONCLUSION

From the results of this study, we conclude that checklist based on BCS gave better scores for nurses than for physicians in providing counseling sessions for clients. This is may be attributed to the longer duration of experience among nurses than physicians of the studied group and also, attending family planning counseling training courses was more prevalent among nurses than physicians total satisfaction score was better among clients in rural facilities

REFERENCES

1. El-Zanaty F, Way A. Egypt Demographic and Health Survey 2008. Cairo, Egypt: Ministry of Health, El-Zanaty and Associates, and Macro International; 2009.
2. Brauner-Otto SR, Axinn WG, Ghimire DJ. The spread of health services and fertility transition. *Demography*. 2007;44(4):747-70.
3. Cleland J, Bernstein S, Ezeh A, Faundes A, Glasier A, Innis J. Family planning: The unfinished agenda. *Lancet*. 2006;368(9549):1810-27.
4. Davis WS, Berry P, Shaw JS. Using bright futures to improve community child health. *Pediatr Ann*. 2008;37(4):232-7.
5. Saka MJ, Yahaya LA, Saka AO. Counseling and client provider-interactions as related to family planning services in Nigeria. *J Educ Pract*. 2012;3(5):16-24.
6. Bongaarts J. Fertility transitions in developing countries: Progress or stagnation? *Stud Fam Plann*. 2008;39(2):105-10.
7. El-Zeiny NA, Abdel Menem HM, Shokier NF, Ali EA. Assessment of the quality of family planning counseling sessions in family health units in Alexandria. MSc Thesis. Egypt: Family Medicine Department, Alexandria University; 2012.
8. Dehlendorf C, Krajewski C, Borrer S. Contraceptive counseling: Best practices to ensure quality communication and enable effective contraceptive use. *Clin Obstet Gynecol*. 2014;57(4):659-73.
9. Makoul G, Clayman ML. An integrative model of shared decision making in medical encounters. *Patient Educ Couns*. 2006;60(3):301-12.
10. Kaunitz AM, Grimes DA. Removing the black box warning for depot medroxyprogesterone acetate. *Contraception*. 2011;84(3):212-3.
11. Rodriguez MI, Curtis KM, Gaffield ML, Jackson E, Kapp N. Advance supply of emergency contraception: A systematic review. *Contraception*. 2013;87(5):590-601.
12. Leon F, Vernon R, Martin A, Bruce L. The Balanced Counseling Strategy: A Toolkit for Family Planning Service Providers. Washington, DC: Population Council; 2008.
13. Mersal FA, Keshk LI. Improving health education skills for nurses working in MCH centers in Egypt to enhance women awareness regarding family planning. *J Am Sci*. 2012;8(2):283-90.
14. Abdel-Tawab N, Roter D. The relevance of client-centred communication to family planning settings in developing countries: Lessons from the Egyptian experience. *Soc Sci Med*. 2002;54(9):1357-68.
15. Jain A, Makawia A, Schlecht J. Tanzania Baseline Survey Report 2004-2005: Technical Report. E and R Study. New York: Engender Health, The ACQUIRE Project; 2006.
16. Crigler L, Alfredo L, de Diez FO, Gearon S, Gyuzalyan H. Factors that influence the performance of healthcare providers in Armenia, Bangladesh, Bolivia, and Nigeria. *Perform Improv Q*. 2006;19(1):99-116.
17. Gordillo A, Pinto E. Ecuador family planning: Quick investigation of quality. In: Sullivan TM, Bertrand JT, editors. *Monitoring Quality of Family Planning Services by the Quick Investigation of Quality (QIQ): Country Reports*. MEASURE Evaluation Technical Report Series No. 5. Ch. 2. University of North Carolina at Chapel Hill, NC: Carolina Population Center; 2000. p. 9-35.
18. Simbar M, Ahmadi M, Ahmadi G, Reza H, Majd A. Quality assessment of family planning services in urban health centers of Shahid beheshti medical science university. *Int J Health Care Qual Assur*. 2006;19(5):430-42.

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