Impact of antenatal counselling on couples' knowledge and practice of contraception in Mansoura, Egypt

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تأثير التوعية قبل الولادة على معارف الزوجات والأزواج وممارستهم لمنع الحمل في المنصورة، مصر مريم حجاج سليمان

خلاصة: تم بحث تأثير التوعية قبل الولادة على معارف الزوجات والأزواج وممارستهم لمنع الحمل. فاستعمل لهذا الغرض استبيان في مقابلات جرت قبل وبعد جلسات للتوعية حضرها 200 سيدة حامل و100 من الأزواج. وتحست متابعة المشاركين بعد الولادة مباشرة ثم بعد مضي ثلاثة أشهر. ولقد أظهرت بجموعة الدراسة والمجموعة الشاهدة. على السواء نقصاً في المعرفة بطرق منع الحمل. وأدت جلسات التوعية إلى تحسين المعارف والممارسات بين أفراد بجموعة الدراسة. كما أن إشراك الأزواج في جلسات التوعية بتنظيم الأسرة، أدى إلى اتخاذ قرارات مشتركة، وشجع النساء على استعمال وسائل منع الحمل. واحتفظت أكثرية الأزواج والزوجات بمعظم المعلومات المقدمة لهم. ونوسي بإدخال التوعية حول تعظيم الأسرة ضمن رحاية حا قبل الولادة في سائر المرافق وكذلك بإشراك الأزواج في جلسات التوعية.

ABSTRACT The impact of antenatal counselling on couples' knowledge and practice of contraception was investigated. An interview questionnaire was used before and after conducting counselling sessions with 200 pregnant women and 100 spouses. The participants were followed up immediately after delivery and 3 months later. Both the control and study groups displayed a lack of knowledge of contraception. Counselling sessions improved the couples' knowledge and practice in the study group. Involving husbands in family planning counselling sessions led to joint decisions being made and encouraged women's use of contraception. The majority of couples retained most of the information given. Integrating family planning counselling into antenatal care in all facilities and involving the husband are recommended.

Impact du conseil prénatal sur les connaissances et pratiques des couples concernant la contraception à Mansoura (Egypte)

RESUME L'impact du conseil prénatal sur les connaissances et pratiques des couples en matière de contraception a fait l'objet d'une étude au moyen d'un questionnaire d'interview avant et après l'organisation de sessions de conseil auprès de 200 femmes enceintes et 100 épouses. Les participantes ont été suivies tout de suite après l'accouchement puis trois mois plus tard. Il est apparu chez le groupe étudié comme chez le groupe témoin un manque de connaissances sur la contraception. Les sessions de conseil ont amélioré les connaissances et pratiques des couples dans le groupe étudié. La participation des maris aux sessions de conseil de planification familiale a abouti à la prise de décision à deux et a encouragé les femmes à utiliser la contraception. La majorité des couples ont retenu la plupart des informations fournies. L'intégration du conseil de planification familiale dans la surveillance prénatale au niveau de toutes les structures et la participation du mari aux sessions de conseil sont recommandées.

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Introduction

A call to reduce infant and maternal mortality rates by half was part of the platform of action of the International Conference on Population and Development held in Cairo in 1994, which was reaffirmed at the Fourth World Conference on Women held in Beijing in 1995 [1,2]. Since that time, family planning (FP) counselling has become an integral part of maternal health care [3,4].

In Egypt, more than 2500 women die every year from problems related to pregnancy and childbirth, leaving behind about 2000 motherless newborns [5,6]. Many of these deaths follow high-risk pregnancies and 20% to 40% result from unsafe abortion. Nearly all of these deaths could be avoided if women had received appropriate FP counselling [6,7].

FP counselling is bilateral dialogue between the counsellor and the counselled which can be distinguished from other activities that involve one-to-one communication, such as motivating, informing and educating. It is a distinct activity to help the client make voluntary and informed choices [6].

FP counselling can be provided during different periods of a woman's reproductive life. There are important differences between the counselling provided to a pregnant woman versus a woman who is not pregnant. Although the main concern of pregnant women and their partners is the health of the mother and fetus and care of the expected baby, they also need to plan for the future [8,9]. In fact, the antenatal period is an opportune time for FP counselling to have women begin to consider their future contraceptive option prior to delivery, to make informed and voluntary decisions about their reproductive lives, to

prevent unsafe abortion and unwanted pregnancy as well as high-risk ones [6,10,11].

It is extremely beneficial to involve women's partners in FP counselling [12]. This may encourage women's use of contraception and improve the continuation rate [13,14].

The nurse as a FP counsellor and health care provider should be knowledgeable enough to be able to inform, educate and communicate (IEC) and to correct rumours and misbeliefs about FP methods. Another important role of the counsellor is to empower the client to make her/his own choices in FP [3,15]. This is also an ideal time for the nurse to discuss the health benefits of child-spacing for both the child and the mother [14].

The aim of this study was to investigate the impact of antenatal counselling on couples' knowledge and practice of contraception.

Subjects and methods

The study was carried out at the maternity hospital at the University of Mansoura as well as the homes of defaulters. The sample of the study included 200 randomly selected newcomers to the outpatient clinic, who were in their second trimester of pregnancy. Only 100 husbands were available for the study.

A structured interview questionnaire was designed to collect information from the participants on their knowledge and practice of FP prior to counselling intervention, after intervention and 3 months later.

Antenatal counselling sessions for the women and their husbands were designed using the "gather" technique [16] (G: greeting clients, A: asking clients about them-

selves, T: outlining the different FP methods, H: helping in choosing a method, E: explaining how to use a method and R: return for follow-up) and used by the researcher in the second trimester at the antenatal clinic over a period of 1 year.

All the women were examined at the clinic. The high-risk pregnant women were noted at the first visit, the criteria being: very young (< 20 years) or old (> 40 years), grand multipara, previous abortions or cæsarean sections, pre-eclampsia/eclampsia, and those with medical complaints.

Women were randomly allocated to one of two groups where individual FP counselling sessions were given in three consecutive sessions (1 hour each) to half of the sample (100 women and 50 husbands) and the other group was given the routine care of the clinic only as a control group.

Counselling sessions included the anatomy and function of the female reproductive system, the purpose of FP and follow-up visits, the benefits of FP, different methods of FP as well as the advantages, disadvantages, side-effects, warning signs, complications and contraindication of each method. Return of ovulation after delivery was also included. Audiovisual aids were prepared and used during counselling sessions, such as flipcharts, posters, contraceptive methods and a pelvic model.

Follow-up was carried out to evaluate the effectiveness of counselling immediately after delivery at the return scheduled visits at the end of puerperium and 3 months later. Home visits were made to the defaulters and to meet any husbands who had been absent during the follow-up visits.

Data were coded, tabulated, statistically analysed and presented as percentage distribution. Z-test for proportions, χ^2 and the Student t-test were used.

Results

Table 1 shows that, 9 (4.5%) women in the study and control groups were under 20 years of age and were considered high-risk cases (too young); 132 (66%) were between 20 years and < 30 years, 39 (19.5%) were in the age group of 30 - < 35 years, while 20 (10%) were 35 years or more and were also considered as high-risk cases (too old). The mean age of the pregnant women in the study group \pm standard deviation was 27.9 \pm 5.23 years and 27.7 \pm 4.95 years in the control group with no statistical difference (P > 0.05).

Table 1 also shows that 115 (57.5%) of both groups were either illiterate or could just read and write; 44 (22.0%) had primary education, 30 (15.0%) had preparatory or secondary education. Only 11 (5.5%) had completed their higher education. There was no significant difference between the study and control groups ($\chi^2 = 0.88$, P > 0.05).

Table 2 shows that there was no significant difference in the profile of the women's spouses in the study and control group; 35 (70%) were over 30 years old. The mean age of the husbands \pm standard deviation was 39.6 ± 21.06 years and 38.8 ± 20.4 years in the study and control groups respectively. More than half, 26 (52%), were either illiterate or could just read and write and 27 (54%) were skilled/unskilled workers and 10 (20%) were farmers.

The mean parity of the women \pm standard deviation in the study and control groups was 1.36 ± 1.54 and 1.58 ± 1.45 respectively and 36% and 32% were nulliparas respectively (Table 3). About three-quarters had planned the present pregnancy, while the remaining quarter had not. They either got pregnant while using contraception or because they had stopped us-

Table 1 Distribution of normal and high-risk pregnant women in the study and control groups by age and educational level

Variable		Study	group			Control	group		To	tal	
	Normal pregnancy (n = 68)		pregi	risk nancy : 32)	pregi	Normal pregnancy (n = 69)		High-risk pregnancy (n = 31)		(n = 200)	
	No.	%	No.	%	No.	%	No.	%	Ñо.	%	
Age (years)											
< 20			5	15.6			4	12.9	9	4.5	
20 –	20	29.4	5	15.6	21	30.4	5	16.2	51	25.5	
25 –	31	45.6	8	25.0	33	47.8	9	29.0	81	40.5	
30 –	17	25.0	3	9.4	15	21.8	.4	12.9	39	19.5	
35+			11	34.4			9	29.0	20	10.0	
Mean ± s		27.9 ± 5.23		5.23		27.7 ±			t=0.278. P>0.05		
Education											
Illiterate	23	33.8	10	31.2	28	40.6	9	29.0	70	35.0	
Read and write	19	27.9	6	18.7	15	21.7	5	16.1	45	22.5	
Primary	15	22.1	7	21.9	12	17.4	10	32.3	44	22.0	
Preparatory/											
secondary	8	11.8	7	21.9	9	13.0	6	19.4	30	15.0	
Higher	3	4.4	2	6.3	5	7.3	1	3.2	11	5.5	
					$\chi^2=0.8$	8, <i>P</i> > 0.0	05		39 20 t=0. P>0 70 45 44		

 $[\]chi^2$ for comparison of study and control high-risk groups = 0.02, P > 0.05

ing it for treatment for cervical inflammation. Regarding the past experiences of pregnant women with FP, approximately half of both groups had used contraception previously. Intrauterine devices (IUDs) and pills were the most common methods used by the study group (40% and 26% respectively) and the control group (34.1% and 15.9% respectively). More than half of both groups (62.0% of the study group and 52.3% of the control group) were happy with their previous FP method and did not want to change. Regarding the source of information, 57% and 62% of the study group and control group respectively said that the media were the main source of their FP knowledge, while the minority (8%

of the study group and 10% of the control group) had obtained it from hospitals or FP clinics. Neither the study group nor the control group had had previous FP counselling.

Table 4 illustrates that a small percentage in the study (12%) and control (14%) groups were aware of FP before counselling. After counselling the study group, FP knowledge increased to nearly 75% in most of the items, whereas the control group either had no or slight differences. The knowledge retained during the follow-up visit (after 3 months) had increased in the study group only; 74% of women in the study group could remember the anatomy and function of the female reproductive

s = standard deviation

Table 2 Sociodemographic characteristics of husbands of the study and control groups

Variable		group : 50)		l group : 50)	Test of significance
	No.	%	No.	%	
Age (years)					
< 30	15	30	12	24	
30	9	18	14	28	
40	18	36	20	40	
50-	8	16	4	8	
Mean ± s	39.6 ±	21.06	38.8	± 20.4	t = 0.18, P > 0.05
Level of education					
Illiterate	9	18	11	22	$\chi^2 = 2.98, P > 0.05$
Read and write	17	34	23	46	•
Preparatory/secondary	21	42	13	26	
Higher	3	6	3	6	
Occupation					
Skilled/unskilled worker	27	54	25	50	$\chi^2 = 0.22, P > 0.05$
Farmer	10	20	10	20	•••
Office worker	13	26	15	30	

s – standard deviation

system and 90% remembered the purpose of FP and follow-up as compared with 13% and 10% in the control group respectively. None of the control group was aware of the time of ovulation after delivery at any of the studied intervals. Highly significant differences were found in the study group's knowledge (P < 0.01) while no differences were observed among the control group.

Table 5 shows who made the decisions regarding contraception. Prior to counselling sessions, the decision tended to be made either by the wife alone (41%) or the husband alone (29%). After counselling sessions, this percentage decreased, while joint decisions rose significantly from 15% to 56% in the study group only.

Two women (6.3%) with high risk in the study group had voluntary tubal ligation during labour. One was diabetic and the other had a heart problem. Also, 11 women

(16.2%) with normal pregnancy and 6 (18.8%) with high-risk pregnancy inserted postpartum IUDs compared with only 2 women (6.5%) in the control group.

The overall contraceptive practices after counselling intervention are shown in Table 6. All the women 32 (100%) with high-risk pregnancies and 59 (86.8%) with normal pregnancy in the study group had practised contraception compared with 20 women (64.5%) with high risk and 23 (33.3%) with normal pregnancy in the control group respectively. Of these, 24 (35.3%) and 9 (28.1%) with normal and high-risk pregnancies of the study group preferred IUD compared with 5 (7.2%) and 4 (12.9%) in the control group respectively. The same results were observed in those who used the lactational amenorrhoea method (LAM) [12 (17.6%) and 8 (25%) compared with 5 (7.2%) and 5

Table 3 Distribution of pregnant women according to parity, pregnancy planning and past experience of FP

Variable	Study group $(n = 100)$	Control group $(n=100)$	Test of significance
Parity	· · · · · · · · · · · · · · · · · · ·		
0	36	32	
1	11	18	
2	30	30	
>2	23	20	
Mean ± s	1.36 ± 1.54	1.58 ± 1.45	t = 0.24, P > 0.05
Present pregnancy			
Planned	75	70	$\chi^2 = 0.63, P > 0.05$
Unplanned	25	30	
Past experience of FP			
Type of FP method:			$\chi^2 = 0.72, P > 0.05$
Pil	13 (26.0%)	7 (15.9%)	, ,
Intrauterine device	20 (40.0%)	15 (34.1%)	
Barrier method	5 (10.0%)	9 (20.5%)	
Injectable	4 (8.0%)	7 (15.9%)	
Abstinence	2 (4.0%)	3 (6.8%)	
Lactational amenorrhoea	6 (12.0%)	3 (6.8%)	
Implant	1 (2.0%)ª	-	
Desire to continue using			
previous FP	31 (62.0%)	23 (52.3%)	$\chi^2 = 1.62, P > 0.05$
Source of FP information		•	,
Mass media	57	62	$\chi^2 = 1.21, P > 0.05$
Neighbours and relatives	35	28	,, <u></u> ,,
Hospitals or FP clinics	8	10	

^{*}One of the study group used mixed methods and used both Norplant and a barrier method to ensure effectiveness.

(16.1%) of women with normal and highrisk pregnancy in the study and control group respectively] and or barrier method [8 (11.8%) and 2 (6.3%) compared to 2 (2.9%) and 1 (3.2%) of women with normal and high-risk pregnancy in the study and control group respectively]. There were significant differences between both groups (P < 0.01).

Table 7 shows that the use of FP works best when couples have discussed and de-

cided together the contraceptive method they will use and 32 (68%) of them used an FP method immediately after delivery compared with only 15 (30%) of the wives who received counselling without their husbands. On the other hand, only 12 (12%) of the control group used an FP method immediately after delivery. It was also observed that female sterilization and abstinence were decided by 5 (10%) and 8 (16%) of the couples respectively, while

FP = family planning

1.68 1.56 0.00 0.43 0.11

Women's awareness*		Study group $(n = 100)$	p (n = 100)	ļ		Control group $(n = 100)$	up (n = 100
	Bafore counselling	Immediately after delivery	Three months later	χ^2	Pretest	Immediately after delivery	Three months later
Anatomy and function of	•	\$	ì	6	Ç	Ş	ć
female reproductive system	6 0	8	4	108.03	2	5	<u>5</u>
Purpose of FP and follow-up	15	8	86	151.44	5	10	9
Benefits of FP	8	. 72	88	57.99	11	11	8
FP methods (modern/traditional)	0	98	88	222.92	0	ĸ	4
Advantages and disadvantages							
of each method	17	8	2	68.52	12	\$	5
Side-effects of each method	10	8	8	57.11⁴	ц	ĸ	5
Warning signs of FP methods	ဖ	78	83	148.03	7	7	7
When to use each method	ম	88	8	55.71₺	22	ଞ	88
How to use each mathod	සී	75	æ	42.30	5	45	€
Complications of each method	ন	88	83	48.60	8	4	8
Contraindications to using a							
method	જ	8	2	47.24	କ୍ଷ	83	83
Time of ovulation after delivery	0	8	74	135.53	0	•	0

0.57 0.00 0.41 4.87

'Three information points at least to be mentioned 'Significant at P < 0.01
FP = family planning

Table 5 Decision-maker for FP among the study and control groups

Decision-maker	Study	y group (<i>n</i> =	100)	Control group ($n = 100$)				
	Before counselling	After delivery	Z-test	Pretest	After delivery	Z-test		
Wife alone	41	21	3.13⁴	49	49	0.00		
Husband alone	29	18	1.85	24	24	0.00		
Joint decision	15	56	6.71ª	16	16	0.00		
Other family members	15	5	2.39⁵	11	11	0.00		

*Significant at P = 0.01

^bSignificant at P = 0.05

FP = family planning

Table 6 Use of FP methods within 48 hours of delivery	y and 3 months later
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Type of contraception		Study	group			Contro	ol group		
		rmal = 68)		n-risk = 32)		Normal (n = 69)		High-risk (n = 31)	
	No.	<u>%</u>	No.	%	Ño.	%	No.	%	
Follow-up within 48 hours of delivery									
Postpartum IUD	11	16.2	6	18.8	2	2.9	0	0.0	
LAM for 6 months	15	22.1	13	40.6	5	7.2	5	16.1	
Sterilization	0	0.0	2	6.3	0	0.0	0	0.0	
Total users	26	38.2	21	65.6	7	10.1	5	16.1	
Follow-up 3 months later									
Injection	6	8.8	2	6.3	4	5.8	2	6.5	
Pills (minipills)	5	7.4	2	6.3	5	7.2	4	12.9	
IUD .	24	35.3	9	28.1	5	7.2	4	12.9	
LAM	12	17.6	8	25.0	5	7.2	5	16.1	
Sterilization	1	1.5	4	12.5	0	0.0	2	6.5	
Barrier/condom	8	11.8	2	6.3	2	2.9	1	3.2	
Abstinence	3	4.4	5	15.6	2	2.9	2	6:5	
Total users	59	86.8	32	100.0	23	33.3	20	64.5	

Z-test between study and control groups within 48 hours — normal groups: Z = 4.06. P< 0.01; high-risk groups: Z = 4.65, P < 0.01

Z-test between study and control groups 3 months later — normal groups: Z = 7.64, P < 0.01; high-risk groups: Z = 4.13, P < 0.01

FP = family planning IUD = intrauterine device

LAM = lactational amenorrhoea method

none of the pregnant women who received counselling alone chose those methods.

Table 8 shows the husbands' awareness of FP items. Prior to counselling sessions, 15 (30%) of the study group and 11 (22%)

Type of		Study	group		Contro	d group	χ² (<i>P</i> -value)	
contraception used	(50 m	eartners en, 50 men)	_	alone omen)	(100 W	romen)	-	
	No.	%	No.	%	No.	%		
Within 48 hours of de	livery							
Postpartum IUD	11	22.0	6	12.0	2	2.0	19.50 (< 0.01)	
LAM	19	38.0	9	18.0	10	10.0		
Sterilization	2	4.0	0	0.0	0	0.0		
Total	32	68.0	15	30.0	12	12.0		
Up to 3 months later								
Injection	5	10.0	3	6.0	6	6.0	1.82 (> 0.05)	
Pills	5	10.0	2	4.0	9	9.0		
IUD	11	22.0	22	44.0	9	9.0		
LAM	10	20.0	10	20.0	10	10.0		
Sterilization	5	10.0	0	0.0	2	2.0		

7

0

44

14.0

0.0

88.0

Table 7 Impact of counselling sessions on the decision to use a FP method

FP = family planning

Barrior/condom

Abstinence

Total

IUD = intrauterine device

6.0

16.0

94.0

LAM = lactational amenorrhoea method

3.0

4.0

43.0

3

4

43

of the control group were aware of different FP methods. This percentage increased significantly [32 (68%), P < 0.05] among the study group after counselling sessions, while no difference occurred in the control group. The same result was also obtained with most of the items investigated, such as the purpose FP, the benefits, the advantages and disadvantages of each method, the side-effects and complications of FP methods as well as the time of ovulation.

3

8

47

Discussion

FP services help couples to have a satisfying and safe sex life. They allow them the capability to reproduce and the freedom to decide if, when and how often to do so [12,17]. Thus, counselling is the ideal approach to enable each couple to make free

and informed choices about FP. Some authors recommend counselling during the antenatal period as the most appropriate time for women to make their voluntary decision for FP [6,9].

The present study showed that nearly a quarter of both the study and control groups had not planned the present pregnancy, there was a lack of essential information about previously used FP devices, and no one had received any FP counselling before. This indicates that maternity services are lacking.

Avoiding pregnancy before the age of 20 years and after the age of 35 years, helps to decrease the health risk for both mother and child [18,19]. However, the present study revealed that 4.5% of pregnant women were under 20 years of age and 10% were 35 years or more. This may

Table 8 Husbands' awareness, approval and use of FP

Husbands' awareness		Stu	dy grou	ıp <i>(n</i> = :	50)		Cor	ntrol gr	fter % 22 26 20 32 30 42	n = 50)	
		fore selling	Aft		Z-test	Pretest		After delivery		Z-test	
	No.	%	No.	%		No.	%	No.	22 26 20 32 30 42 4 32		
FP methods	15	30	32	68	2.05°	11	22	11	22	0.00	
Purpose of FP	15	30	40	80	2.92b	13	26	13	26	0.00	
Benefits of FP	15	30	40	80	2.92°	8	16	10	20	0.35	
Advantage and disadvantag		40			0.045			40			
of each method	8	16	29	58	2.815	13	26	16	32	0.43	
Side-effects of each method	11	22	38	76	3.31⁵	15	30	15	30	0.00	
Complications of each											
method	28	56	48	96	2.11ª	24	48	21	42	0.36	
Time of ovulation after											
delivery	4	8	26	52	3.24b	2	4	2	4	0.00	
Approving of FP	19	38	31	62	1.40	16	32	16	32	0.00	
Use of male contraception	3	6	11	22	1.59	5	10	5	10	0.00	

^{*}Significant at P < 0.05

FP = family planning

be attributed to the culture of rural areas and also to the high illiteracy rate.

In general, the study found a significant improvement in couples' knowledge and practice following counselling. Their awareness of most FP items increased, such as the purpose, benefits and side-effects of each method. Also, it was noticed that the knowledge retained after 3 months increased in most of the studied items.

Counselling sessions offered couples information about a variety of methods and let them make their own decision about which method to adopt. It also helped them in weighing the advantages and disadvantages of different methods. This finding confirms the findings of a recent report that insufficient information and inadequate advice do not allow couples to make fully informed choices [12]. The acquired knowledge helped couples enrolled in the

study to recognize the side-effects of their chosen method and encouraged them to seek follow-up until 3 months after delivery. It was surprising to find that none of the pregnant women was aware of all the methods of contraception and had never heard about methods used during the puerperium, such as postpartum IUD or minilaparatomy. It was also the first time that they had learned that ovulation returns before the first menstruation after delivery. Thus, the counselling sessions helped them to plan and choose a method to postpone their next pregnancy, to regain their health and to initiate breastfeeding successfully (most of them had had previous experience with LAM).

The study found that the vast majority (91%) of the studied group used FP methods compared with 43% of the control group, which indicates the high positive ef-

^bSignificant at P < 0.01

fect of FP counselling sessions during the antenatal period which gives couples a chance to decide to use a suitable contraceptive method.

The greatest change in contraceptive practices after counselling sessions was among the high-risk women of the study group; all of them used a contraceptive method immediately after delivery and were still using it up to 3 months later. Similar results have been reported in demographic and health surveys carried out in 21 developing countries in sub-Saharan Africa [20].

In many cultures, husbands often influence their wives reproductive attitudes and determine whether or not they use contraception [7]. Thus, FP will work better when both couples are involved in counselling sessions. This was found in the present study. Prior to counselling sessions, FP decisions were made either by the wife or husband alone. After counselling intervention, joint decision-making increased significantly with the study group, while no difference was found in couples of the control group. The results of this study are similar to those of a study carried out in Mombassa to involve men as partners in reproductive health [21]. However, in some studies comparing various household decisions, women appear have more say about using contraception [7,14]. Some women decide to use contraception without telling their husbands. African women have reported doing so because they think that their husbands would disapprove. Some men have said that joint decisions are unnecessary because the women decide on their own the number and timing of pregnancies. The present study also found that 41% of the women reported that they were the one who decided whether to use contraception or not compared with 29% of husbands who made the decision upon contraception. Furthermore, the majority (94%) of couples who received counselling sessions together in the study group used a contraception method compared with 88% of couples where the women were counselled alone. In addition, less than half (43%) of the control group practised contraception. Men have more say in decision-making for some contraceptive methods, such as female sterilization, as the study showed that all the women who underwent this were in the couples' group. None of the women who received counselling alone could take this decision.

Conclusions and recommendations

In conclusion, the study showed that FP counselling during the antenatal period had a positive effect on couples' knowledge and practice of FP. It is recommended, therefore, that:

- FP counselling services should be increased to include all maternity hospital departments, maternal and child health clinics and rural health units:
- counsellors should help couples make their choices and decisions freely and based on relevant information to ensure continuation;
- continuous refresher training programmes should be offered to counsellors;
- husbands should be involved during FP counselling sessions.

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