VIA MEDICA

ORIGINAL PAPER / GYNECOLOGY

Ginekologia Polska
2017, vol. 88, no. 12, 639–646

ISSN 0017–0011

DOI: 10.5603/GP.a2017.0115

What influences women's contraceptive choice? A cross-sectional study from Turkey

Ilker Kahramanoglu[1], Merve Baktiroglu[2], Hasan Turan[1], Ozge Kahramanoglu[2], Fatma Ferda Verit[2], Oguz Yucel[2]

[1]Department of Obstetrics and Gynecology, Cerrahpasa Faculty of Medicine, Istanbul University, Turkey
[2]Department of Obstetrics and Gynecology, Suleymaniye Maternity, Research and Training Hospital, Istanbul, Turkey

ABSTRACT

Objectives: In our study, we tried to investigate the determinants of women's choices about contraception with the aim of discovering whether or not there is a difference in their preferences before and after consultation with a gynaecologist.

Material and methods: A total of 1058 women were enrolled. They were given detailed information regarding contraception and contraceptive methods. Subsequently, a survey which was made of 21 questions was administered.

Results: Contraceptive counselling significantly changed the contraceptive choice of women. However, influences from social media and friends, their partners and religious belief affected their contraceptive choices. Significant differences in contraceptive choice were observed when women were categorized according to their marital status, education level, household income, age, and number of children.

Conclusions: Although contraceptive counselling influenced Turkish women's choices, there were still other determinants like social media and input from outside sources such as clerics and husbands, which should be overcome.

Key words: combined oral contraceptive, condom, contraception, intrauterine device, tubal ligation

Ginekologia Polska 2017; 88, 12: 639–646

INTRODUCTION

Worldwide, more than 80 million unintended pregnancies occur each year and 50% of them results in induced abortions [1]. Even in countries with high contraceptive usage rates, up to 40% of women are at increased risk for unintended pregnancy because of inconsistent contraceptive use and inappropriate contraceptive choice [2]. Unfortunately, imperfect use of a contraceptive method is often caused by incorrect information and recommendation by health care provider [3, 4]. To reduce failure rates of contraceptive methods, the clinician must go beyond the presentation of information and give detailed counselling that covers the mechanism of action, possible side effects, and the risks and benefits of a particular contraceptive method.

In Turkey, two million pregnancies occur each year, 47.3% of which are unintended, despite a 73% rate of contraceptive use [5, 6]. In this country, the most preferred contraceptive methods are withdrawal (26%) and intrauterine device (17%) [6].

When the frequency and associated morbidity and costs are considered, we think that contraception use among women should receive more attention in research. The ideal contraceptive method for a woman may vary according to age, general health, fertility, whether she is a smoker or a non-smoker, number of partners, and convenience and ease of the method.

The Contraceptive CHOICE Project was a prospective cohort study that involved more than 9000 women in and around St. Louis, Missouri, USA. Many results from the study have been published [7, 11]. However, contraception choice may differ depending on religion and culture, even between women living in the same country [12]. In this study, Muslim women living in Istanbul with a mother language of Turkish were evaluated for their contraceptive preferences and their reasons for those preferences. In addition, after personalized counselling by one of three gynaecologists, trends in change of women's choice were investigated along with the reasons for the change.

Corresponding author:
Ilker Kahramanoglu
Department of Obstetrics and Gynecology, Cerrahpasa Medical Faculty, Istanbul University, Istanbul, Turkey
e-mail: ilkerkahramanoglu@gmail.com

MATERIAL AND METHODS

This cross-sectional study was conducted in one of the tertiary obstetric and gynaecological centres of Istanbul (Health Sciences University Suleymaniye Women's Health Research and Training Hospital). The study was approved by the human ethics committee of the Dr Sadi Konuk Training and Research Hospital. The manuscript was prepared in accordance with the STrengthening the Reporting of OBservational studies in Epidemiology (STROBE) guidelines [13].

All of the women who applied for contraception were enrolled into the study during the period from May 2010 until February 2014 if they accepted to sign an informed consent before entry into the study.

All patients had been living in the city for at least one year. The women who came to the hospital could be divided into three categories: those who had already made the decision about contraceptive method and did not want any advice (n = 97), those who had one or two methods in mind but still wished to receive contraceptive counselling (n = 219), and those who had not yet made a decision (n = 839). Women in the first group were excluded from the study. The other exclusion criteria included unwillingness to participate in the study (n = 30), inability to read or write in Turkish (n = 11), and a lack of health insurance (n = 28).

To begin the study, the medical history of each woman was taken. Pelvic examinations were performed only on women who had not had a gynaecologic examination in the previous year, as well as those with irregularities such as menstrual disorders, pelvic pain and vaginal discharge (to exclude pelvic inflammatory disease), previous cervical surgery, and an abnormal Pap smear test result in their medical histories. A total of 1058 women who came to hospital for contraceptive counselling were given detailed information regarding mechanism of action, efficacy, metabolic effects, side effects, risk of cancer, effects on fertility, effects on menstrual cycle, and non-contraceptive benefits, on the following contraceptive methods: intrauterine device with copper (CU-IUD); levonorgestrel-releasing intrauterine device (LNG-IUD); combined oral contraceptives (COC); condom; bilateral tubal ligation (BTL); Norplant; depot medroxyprogesterone acetate (DMPA); and fertility awareness-based methods (FABM) such as calendar methods, cervical mucus methods, basal body temperature method, symptothermal method, and withdrawal. All of the counselling sessions were performed by one of three gynaecologists (IK, MB, OK). Cochrane reviews and WHO guidance about contraception were used when needed [14–18]. All of the recommendations were at the basis of free-choice. All participants responded to the survey, which was made up of 21 questions (see Appendix 1).

In Turkey, government insurance covers CU-IUD, COC, condom, BTL, DMPA and vasectomy as contraceptive methods. LNG-IUD and Norplant are other options, but they have to be paid for out-of-pocket.

All analyses were conducted using SAS version 9.3. Data were checked to identify any outliers, and statistical analysis was conducted to examine the relationship between the outcome of interest (final choice of specific contraception method) and all other independent variables. Descriptive statistics of final contraception choice were calculated with respect to measures of socio-demographic characteristics. Acceptance of different contraceptive methods in women seeking contraceptive options or who had already decided on a contraceptive method, acceptance of different contraceptive methods in relation to obstetric status of women, and the reason(s) why women decided on a specific method were also evaluated by using descriptive statistics. Comparison of categorical variables were done with Chi Square (Fisher Exact test, if applicable) Test. Logistic regression analysis was used in order to determine the effect of parameters on decision changing. To identify characteristics of participants that may have effect on changing pre-decided contraception method after receiving counseling, we conducted a multiple logistic regression analysis. We created a variable called change (= 1 if the patient changed her pre-decided contraception method after receiving consultation, 0 = otherwise). As independent variables we have included patients' characteristics including age, education level, income, number of children, marital status.

RESULTS

Some characteristics of the women involved in the study are presented in Table 1. Women had a mean age of 31.1 years, with a range of 18–47.

Table 2 shows the statistically significant change in women's contraceptive choice before and after counselling. Transitions from first choice to other contraception were presented in Figure 1 for each contraceptive method. The most common reason for rejection for CU-IUD use was "fear or experience of abnormal uterine bleeding from CU-IUD (13 women; nine of them chose BTL, three of them chose condom, and one chose LNG-IUD). The second common reason for rejection of CU-IUD was "fear of infection and/or pelvic pain" (six women; four of them chose DMPA and two chose COC). LNG-IUD was the most requested method after counseling (431 of 1058 women; 45.6%), perhaps due to the non-contraceptive benefits the method provides such as treatment of heavy menstrual bleeding, endometriosis, adenomyosis, and endometrial hyperplasia. The most commonly identified barrier to LNG-IUD use was its high cost (n = 357). When a COC was recommended, the most obvious problem to overcome was fear of weight gain. Despite being provided with detailed information, 318 women rejected COCs for this reason. No unique cause was cited

Table 1. Demographic and behavioral characteristics of women

	n	%
Age [years]		
≤ 20	105	9.9
21–25	206	19.4
26–30	289	27.3
31–35	260	24.5
36–40	168	15.8
> 40	30	2.8
Marital status		
Single	36	3.4
Married	841	79.4
Other*	181	17.1
Education level		
Less than high-school	374	35.3
Completed high-school	579	54.7
College	99	9.3
Graduate college	6	0.5
Income (TL/per month in 2013–2014)**		
< 500	53	5.0
500–1000	344	32.5
1000–2000	493	46.5
2000–3000	108	10.2
3000–4000	37	3.4
> 4000	23	2.1
Number of children		
0	48	4.5
1	315	29.7
2	354	33.4
3	222	20.9
> 3	119	11.2
Family planning		
Completed	285	26.9
Not completed	602	56.8
Unsure	171	16.1

*Includes widowed, seperated or divorced women
**Euro/TL parity changed between 2.36 and 3.08 during the study period

for those who did not want to use condoms. The most common reasons to not to select BTL included fear of menstrual changes (n = 69), earlier menopause and perimenopausal symptoms (n = 61), including sweating, flushing, vaginal dryness. When questioned, the women who rejected BTL told they were influenced by what their friends told them or items shared on social media. Moreover, 11 women also refused the procedure based on religious belief, and four women stated that their husbands did not want them to go through the procedure. Among women who were offered Norplant, almost all rejected the system. Only five women had learned any information about Norplant prior to counselling, and three of them had a fear of losing the Norplant inside her body. DMPA was rejected by 48 women due to fear of weight gain and/or becoming amenorrhoeic. Contrary to expectations, a possible significant delay in return to fertility did not influence contraceptive choice.

Finally, CU-IUD was the most popular choice of contraceptive method (45.6%). Some women's statements showed that they felt CU-IUD was the safest method because of the belief that something inside the uterus can easily protect against pregnancy. Additionally, the 10-year efficacy of the device was appealing. That said, four of the women who had used an IUD in the past complained that their partners often felt the strings of the device during intercourse.

Two third of single women chose COC as a contraceptive method (Table 3). Among married women, CU-IUD was the most accepted method (55.7%), followed by LNG-IUD (14.9%). More than one third of women had completed only primary school. CU-IUD (38.5%) and condom use (24.8%) were the most chosen methods among this group. A similar

Table 2. First choice of women, accepted contraceptive method after detailed information and acceptance of women's first choice

	Women's first choice before counselling		The method evantually accepted		Acceptance of their first choice		p
	n	%	n	%	n	%*	
Undecided	219	20.7	0	0	–	–	
CU-IUD	444	41.9	483	45.65	289	65	
LNG-IUD	137	12.9	131	12.38	24	17.5	
COC	116	10.9	104	9.83	27	23.2	
Condom	107	10.1	212	20.04	74	69.1	
BTL	15	1.4	87	8.22	15	100	<.0001**
Norplant	0	0	1	0.09			
DMPA	14	1.3	27	2.55	6	42.8	
FABM	6	0.5	13	1.23	3	50	

CU-IUD — intrauterine device with copper; LNG-IUD — levonorgestrel-releasing intrauterine device; COC — combined oral contraceptives; BTL — bilateral tubal ligation; DMPA — depot medroxyprogesterone acetat; FABM — fertility awareness-based methods (includes calendar methods, cervical mucus methods, basal body temperature method, symptothermal method and withdrawal)
*Women without any first choice of contraceptive method were excluded
**p-value from Chi-square test

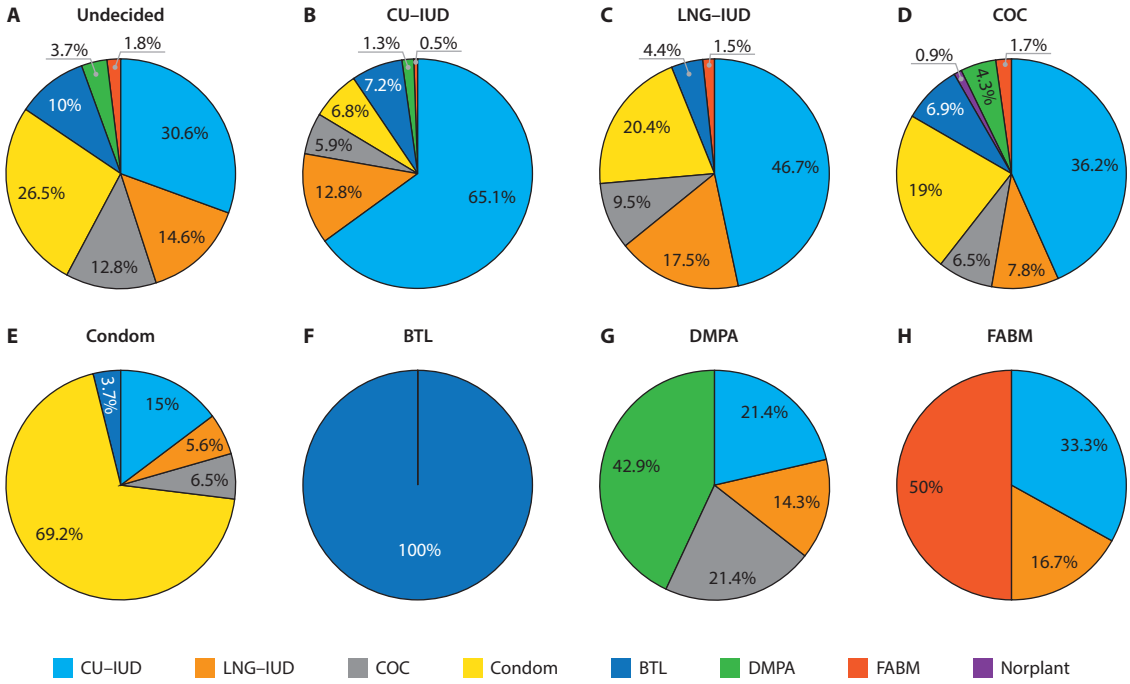

Figure 1. Women's choice of contraceptive method after counselling. **A.** Women who were undecided before counselling; **B.** Women who chose CU-IUD before counselling; **C.** Women who chose LNG-IUD before counselling; **D.** Women who chose COC before counselling; **E.** Women who chose condom before counselling; **F.** Women who chose BTL before counselling; **G.** Women who chose DMPA before counselling; **H.** Women who chose FABM before counselling

tendency was seen among women with a high-school education (CU-IUD: 54.7%; condom: 18.1%). College-educated women were most likely to choose LNG-IUD or COC as contraceptive method. Furthermore, none of the college-educated women chose any of the FABM.

The effect of income was almost always in the case of LNG-IUDs. Because the government insurance does not cover LNG-IUD as a contraceptive method, only one of 10 women with an income of less than 500 TL per month to whom LNG-IUD was offered as a contraceptive method could accept LNG-IUD. Increased income was significantly associated with higher rates of LNG-IUD acceptance when desired (21.6% in women with an income of less than 3000 TL/month vs. 82.1% in women with an income of more than 3000 TL/month; $p = 0.0001$).

As expected, BTL was more likely to be chosen by older women (19.6% of women with age 36 or more vs. 5.8% of women with age 35 or less; $p < 0.0001$). No other correlation was observed between age of women and choice of contraceptive methods. When all patients who chose BTL were evaluated, 70% of these was found to have 3 children or more.

Results of the logistic regression revealed that education level and number of children have significant effects on changing the pre-decided contraception method after receiving the counselling (Table 4). The odds of changing pre-decided contraception method was lower for those who have at least high school education than those who have education less than high school. The odds of changing pre-decided contraception method was 2.98 times greater for those who have monthly income of > 4000 TL than those who have monthly income < 500 TL. Similarly, for those who have monthly income between 3000–4000 TL, the odds of changing pre-decided contraception method was 2.8 times greater than those who have monthly income < 500 TL. In addition, number of children was significantly effecting the decision about changing pre-decided contraception method after receiving counselling. For those who have at least one children, the odds of changing pre-decided contraception method was lower than those who do not have any children.

Determinants of women's choice were summarized in Table 5. While outside influences (social media and/or friends) were observed in intrauterine device, COC, BTL, Norplant and DMPA choice, there was no woman who heard or read about FABM. More than 90% of women were supposed to be Muslim and religion was determinant only for BTL in 11 women. Partner's decision was influential for condom and BTL. Cost of LNG-IUD effected 357 women's decision. Univariate analysis was performed in order to determine the individual effects of determinants on change of decisions (Table 6). Outside influences and partner's input showed significant differences between women who changed and did not change their decision. Significant parameters were

Table 3. Acceptance of contraceptive methods in relation to women's characteristics

	CU-IUD	LNG-IUD	COC	Condom	BTL	Norplant	DMPA	FABM
Marital status								
Single	3 (8.3)	2 (5.5)	23 (63.8)	6 (16.6)	0 (0.0)	0 (0.0)	1 (2.7)	1 (2.7)
Married	468 (55.7)	125 (14.9)	77 (9.1)	77 (9.1)	61 (7.2)	1 (0.1)	21 (2.5)	12 (1.4)
Other*	12 (6.6)	6 (3.3)	4 (2.2)	119 (65.7)	26 (14.3)	0 (0.0)	4 (2.2)	0 (0.0)
Education level								
Less than high-school	144 (38.5)	47 (12.5)	31 (8.2)	93 (24.8)	43 (10.9)	0 (0.0)	9 (2.4)	7 (1.8)
Completed high-school	295 (50.9)	66 (11.3)	55 (9.4)	98 (17.0)	41 (7.0)	1 (0.1)	17 (2.9)	6 (1.0)
College	41 (41.4)	16 (16.1)	17 (17.1)	21 (21.2)	3 (3.0)	0 (0.0)	1 (1.0)	0 (0.0)
Graduated college	3 (50.0)	2 (33.3)	1 (16.6)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Income (TL/per month in 2013–2014)								
< 500	35 (66.0)	1 (1.8)	4 (7.5)	6 (11.3)	7 (13.2)	0 (0.0)	0 (0.0)	0 (0.0)
500–1000	157 (45.6)	29 (8.4)	36 (10.4)	71 (20.6)	30 (8.7)	0 (0.0)	16 (4.6)	5 (1.4)
1000–2000	234 (47.4)	47 (9.5)	45 (9.1)	110 (22.3)	40 (8.1)	1 (0.2)	8 (1.6)	8 (1.6)
2000–3000	36 (33.6)	31 (28.9)	11 (10.2)	21 (19.6)	6 (5.6)	0 (0.0)	3 (1.8)	0 (0.0)
3000–4000	10 (27.0)	16 (43.2)	5 (13.5)	3 (8.1)	3 (8.1)	0 (0.0)	0 (0.0)	0 (0.0)
> 4000	11 (47.8)	7 (30.4)	3 (13.0)	1 (4.3)	1 (4.3)	0 (0.0)	0 (0.0)	0 (0.0)
Age [years]								
≤ 20	49 (46.6)	12 (11.4)	15 (14.2)	25 (23.7)	0 (0.0)	0 (0.0)	3 (2.8)	1 (0.9)
21–25	86 (41.7)	23 (11.1)	32 (15.5)	50 (24.2)	2 (4.8)	0 (0.0)	10 (4.8)	3 (1.4)
26–30	135 (46.7)	38 (13.1)	23 (7.9)	59 (20.4)	21 (7.2)	1 (0.3)	8 (2.7)	4 (1.3)
31–35	122 (46.9)	36 (13.8)	22 (8.4)	47 (18.0)	25 (9.6)	0 (0.0)	4 (1.5)	4 (1.5)
36–40	78 (46.4)	21 (12.5)	9 (5.3)	27 (16.0)	30 (17.8)	0 (0.0)	2 (1.1)	1 (0.5)
> 40	13 (43.3)	1 (3.3)	3 (10.0)	4 (13.3)	9 (30.0)	0 (0.0)	0 (0.0)	0 (0.0)
Number of children								
0	2 (4.1)	1 (2.0)	16 (33.3)	19 (39.5)	0 (0.0)	0 (0.0)	5 (10.4)	5 (10.4)
1	124 (39.3)	29 (9.2)	26 (8.2)	100 (31.7)	15 (4.7)	0 (0.0)	15 (4.7)	6 (1.9)
2	186 (52.5)	67 (18.9)	28 (7.9)	55 (15.5)	11 (3.1)	1 (0.2)	5 (1.4)	1 (0.2)
3	121 (54.5)	24 (10.8)	17 (7.6)	29 (13.0)	30 (13.5)	0 (0.0)	1 (0.4)	0 (0.0)
> 3	50 (42.0)	10 (8.4)	17 (14.2)	9 (7.5)	31 (26.0)	0 (0.0)	1 (0.4)	1 (0.4)

CU-IUD — intrauterine device with copper; LNG-IUD — levonorgestrel-releasing intrauterine device; COC — combined oral contraceptives; BTL — bilateral tubal ligation; DMPA — depot medroxyprogesterone acetat; FABM — fertility awareness-based methods (includes calendar methods, cervical mucus methods, basal body temperature method, symptothermal method and withdrawal); TL — Turkish lira
*Includes widowed, seperated or divorced women

added to logistic regression model. The model was statistically signifiant ($p < 0.001$). As a result of multivariate analysis only outside influences has effect on decision making.

DISCUSSION

Almost all of the participants (99.7%) in our study agreed that physicians and health care providers are the best source for information about contraceptives. The effect of contraceptive counselling depends on what information is given and how. Client-centered contraceptive care was proposed to enhance women's experience of care and ability to achieve their own reproductive goals. Necessary steps were defined as providing friend-like interactions with woman, listening to woman to know the most important thing for her about birth control method, providing relevant information according to her preferences [19]. Also, a recent study found a large heterogeneity in physicians' preference over contraceptive methods for their patients [20]. In the present study, all of the participants received similar counselling by one of three gynecologists. Accurate, easy to understand informations about contraception were given to each woman and their questions and concerns were answered with respect and empathy. All of the women were free to choose any contraceptive method. The role of gynecologist during counselling was to assist women in selecting the method which is the best fit that reflects their preferences for deci-

Table 4. Logistic regression of dichotomous variable whether participant chose the suggested method or not as dependent variable and other factors as independent variables

				95% CI		
	β	SE (β)	OR	Lower	Upper	Pr > ChiSq
Age	–0.00327	0.00582	0.997	0.985	1.008	0.5746
Marital status						
Married vs. single	0.3352	0.3056	1.398	0.768	2.545	0.0586
Other vs. single	1.2812	0.5395	3.601	1.251	10.367	
Education level						0.0028
Completed high-school vs. less than high-school	–0.8984	0.3692	0.407	0.197	0.84	
College vs. less than high-school	–1.2283	0.3427	0.293	0.15	0.573	
Graduate college vs. less than high-school	–1.2588	0.409	0.284	0.127	0.633	
Income (TL/per month in 2013–2014)						0.1813
500–1000 vs. < 500	0.2088	0.3265	1.232	0.65	2.336	
1000–2000 vs. < 500	0.2367	0.3286	1.267	0.665	2.413	
2000–3000 vs. < 500	0.3742	0.3781	1.454	0.693	3.05	
3000–4000 vs. < 500	1.0242	0.4885	2.785	1.069	7.254	
> 4000 vs. < 500	1.0948	0.598	2.988	0.926	9.649	
Number of children						<.0001
1 vs. 0	–0.67	0.1899	0.512	0.353	0.742	
2 vs. 0	–0.7176	0.1927	0.488	0.334	0.712	
3 vs. 0	–1.3674	0.2134	0.255	0.168	0.387	
4 vs. 0	–1.8386	0.3296	0.159	0.083	0.303	
≥ 5 vs. 0	–0.3205	0.4151	0.726	0.322	1.637	

Table 5. Determinants of contaceptive choice other than scientific issues*

	Outside influences	Religion	Fear/risks	Partner's input	Cost
CU-IUD	25	0	26	1	0
LNG-IUD	8	0	9	0	357
COC	23	0	24	0	0
Condom	0	0	0	16	0
BTL	8	11	7	4	0
Norplant	1	0	1	0	0
DMPA	5	0	6	0	0
FABM	0	0	0	0	0

CU-IUD — intrauterine device with copper; LNG-IUD — levonorgestrel-releasing intrauterine device; COC — combined oral contraceptives; BTL — bilateral tubal ligation; DMPA — depot medroxyprogesterone acetat; FABM — fertility awareness-based methods (includes calendar methods, cervical mucus methods, basal body temperature method, symptothermal method and withdrawal)
*While some women did not report any reason, some reported more than one reason for rejection of a contraceptive method

sion making. According to the women interviewed, to be informed about how different contraceptive methods work and to have one's questions answered are both important components of contraceptive counselling.

In undeveloped countries, household income was shown to have an effect on the use and choice of contraception method [21]. Both the prevalence of regular use of contraceptives and choice of modern contraceptives were higher among women with higher incomes. Substantial mismatch between preferred and usual methods among women of lower social economic status was shown [22]. Additionally, not having free will regarding reproductive issue might have been a confounding factor. This obstacle may be overcome by education. A previous study from Turkey investigated the possible factors affecting contraceptive choice of married women. Use of modern methods (IUD,

Table 6. Univariate and multivariate analysis of non-scientific determinants of contraceptive choice

	Decision not changed	Decision changed	Univariate analysis (p)	Multivariate analysis logistic regression (p; OR)
Outside influences			< 0.001[1]	< 0.001; 3.228
(–)	390 (89)	598 (96.5)		
(+)	48 (11)	22 (3.5)		
Religion			0.540[2]	–
(–)	435 (99.3)	612 (98.7)		
(+)	3 (0.7)	8 (1.3)		
Fear/risks			0.199[1]	–
(–)	413 (94.3)	572 (92.3)		
(+)	25 (5.7)	48 (7.7)		
Partner's input			< 0.001[2]	0.998; 0.00
(–)	438 (100)	599 (96.6)		
(+)	0	21 (3.4)		
Cost			0.279[1]	–
(–)	282 (64.4)	419 (66.3)		
(+)	156 (35.6)	201 (32.4)		

[1]Chi-square test, [2] Fisher exact test

COC, condom, BTL, implant) was found more common in middle-aged women, living in urban areas and with higher education [23]. Another research suggested that empowerment of Turkish women (the more educated, those with better socioeconomic status, and those living in less crowded households resort) increases use of modern contraceptives [24]. In our study population, income only affected the choice of LNG-IUD, which is not covered by government. Also, more educated women tended to avoid choosing FABM as a method of birth control. As the choice of the only method not covered by insurance (LNG-IUD) was affected by household income, one may suggest that ensuring access to modern contraceptives at no cost leads to the best contraceptive choices for women regardless of income status.

Partner input was found to have an impact in the cases of 20 women. The same feature of those women was education level: all but one of them had less than a high school education. Four women could not select BTL because of husband dominance. Sixteen women reported that their husbands did not want to use condom as a contraceptive method, so these women chose one of the other methods. None of the women's partners participated in the contraceptive counselling. While it is obvious that contraceptive use affects women's lives, better choices may be made if partners accompany women in contraceptive counselling.

Effect of religious beliefs on contraceptive choice could only be seen when BTL was offered as an option. Despite the fact that a significant decrease in the lifetime risk of ovarian cancer was discussed, it was not enough to change eleven women's decisions, as they had heard from a cleric that BTL is a sin and should not be performed.

While six women wanted to choose FABM before counselling, 13 women ultimately chose FABM. One possible explanation is that the discussion of possible side effects and complications of other methods caused anxiety, and women who had a pre-existing negative conception of contraceptive methods may have easily decided not to use anything containing a hormone or requiring insertion. In addition, no deterrant factor was found for FABM (Table 6).

According to our observations, the hardest prejudices to overcome were anxiety at the prospect of insertion and removal of an intrauterine device, fear of weight gain from COC use, and religious belief (in the case of BTL), while the most common rejection reason was cost of LNG-IUD (n = 357). Furthermore, influences from social media and/or friend was found to be an independent factor determining contraceptive choice. We believe that family planning providers should check for concerns and rumors and explain common myths about the contracepticeptive method to obtain successful counselling.

The same ethnical background is a strength of this study. The apparent limitations are absence of a validated questionnaire and no participation of women's partners in contraceptive counseling. Furthermore, the study does not include women who did not decide to use contraception. Given the importance of unplanned pregnancies and sexually transmitted diseases, women who do not use any contraception and do not participate in contraceptive counselling should be determined, by this way education and

national family planning programmes targeting this group of population may be obtained. Thus, it will be possible to increase contraceptive prevalence rates [25].

CONCLUSION

Contraceptive counselling appears to influence women's decisions and helps them to choose the best method. Contraceptive providers' knowledge should be enhanced and information about mechanisms of action of the methods should be provided. Improved education, partner involvement in counselling, and coverage of all contraceptive methods by health insurance may help in providing the best contraceptive method for each couple. Finally, effective strategies should be developed to overcome influences from social media and clerics.

Acknowledgments

None.

Conflict of interest

None declared.

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