Evaluation of family planning services: A district example in İstanbul

Aile planlaması hizmetlerinin değerlendirilmesi: İstanbul'da bir ilçe örneği

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Abstract

Aim: The aim of family planning services is to provide individuals with the information and support they need to make informed, safe, and healthy reproductive decisions. Furthermore, it provides women with the option to space out their pregnancies and offers protection from unplanned pregnancies. It is thought that family planning services could play a role in protecting maternal and child health, as well as improving the overall health level of society. The objective of this study was to gain insight into the family planning services provided to applicants at the Maternal Child Health and Family Planning (MCHFP) Centre in a district of İstanbul between 2018 and 2020.

Methods: The study population comprised individuals who had applied to the Eyüpsultan MCHFP Centre between 2018 and 2020. We are grateful to have had the opportunity to retrospectively analyze the data of 1,444 individuals.

Results: The study group had an average age of 33.95 years, with 45.2% of participants having completed primary education or below. It may be of interest to note that among the women who applied, 46.2% were in the age group of 35 years and above. It is worth noting that a significant proportion of the women who applied, namely 75.9%, were seeking to use a family planning method for the first time. It would seem that the age groups 29-34 and 35-40 saw the highest number of applications. It is notable that a relatively high proportion of women (49.4%) had not used any family planning method in the previous three months, compared to those who had employed other methods. It would seem that the intrauterine device is the most preferred family planning method across all age groups and education levels ($p<0.05$). It would seem that there is a difference between family planning methods before and after the AÇSAP application, according to years. Furthermore, it was observed that age group, educational level, and number of pregnancies were associated with the use of family planning methods ($p<0.05$).

Conclusion: In the study, the participants demonstrated a clear preference for modern family planning methods (86.1%) following the application period. It is recommended that individuals be provided with comprehensive family planning information and that awareness-raising activities be conducted in the local community. This will facilitate access to family planning services and improve attitudes and behaviors towards family planning.

Keywords: Child health; family planning; maternal health; maternal and child health centers

Öz

Amaç: Aile planlaması hizmetleri, bireylerin üreme ile ilgili kararlarını bilinçli, güvenli ve sağlıklı şekilde almalarını amaçlamaktadır. Ayrıca kadınların gebelikler arasındaki süreyi ayarlamalarına ve istenmeyen gebeliklerden korunmalarına olanak sağlayan bir uygulamadır. Aile planlaması hizmetleri ile anne ve çocuk sağlığı korunabilir ve toplumun sağlık düzeyi geliştirilebilir. Bu çalışmada İstanbul'un bir ilçesindeki Anne Çocuk Sağlığı ve Aile Planlaması (AÇSAP) merkezine 2018 ile 2020 yılları arasında başvuranlara verilen aile planlaması hizmetlerinin değerlendirilmesi amaçlanmıştır.

Yöntemler: Tanımlayıcı tipteki araştırmanın evrenini Eyüpsultan AÇSAP Merkezi'ne 2018-2019-2020 yılları boyunca başvuran kişiler oluşturmuştur. Araştırma kapsamında 1444 kişinin verileri retrospektif olarak değerlendirilmiştir.

Bulgular: Araştırma grubunun yaş ortalaması 33,95 olup katılımcıların %45,2'sinin eğitim düzeyi ilköğretim ve altındadır. Başvuru yapan kadınların, %46,2'si ≥35 yaş grubundadır. Kadınların %75,9'u ilk defa aile planlaması yöntemi kullanmak için başvurumuştur. Yaş gruplarına göre en çok başvuru 29-34 yaş ve 35-40 yaş gruplarında gerçekleşmiştir. Son 3 ayda herhangi bir aile planlaması yöntemi kullanmayanların oranı (%49,4) diğer yöntemleri kullananlardan daha yüksek görülmüştür. AÇSAP Araştırma grubundaki kadınlardan tüm yaş gruplarında ve eğitim düzeylerinde en çok tercih edilen aile planlaması yöntemi Rahim İçi Araç olmuştur ($p<0,05$). Yıllara göre AÇSAP başvurusu öncesi ve sonrası aile planlaması yöntemleri arasında farklılık gözlenmiştir. Ayrıca yaş grubu, eğitim düzeyi ve gebelik sayısı ile aile planlaması yöntemi kullanımı arasında ilişkili tespit edilmiştir ($p<0,05$).

Sonuçlar: Araştırmada katılımcıların başvuru sonrası aile planlaması tercihi ağırlıklı olarak modern yöntemler (%86,1) olmuştur. Aile planlaması konusunda bireylerin desteklenmesi ve topluma yönelik farkındalık çalışmalarının yapılması, bireylerin aile planlaması hizmetlerine erişimini ve aile planlamasına yönelik tutum ve davranışlarının geliştirilmesine yardımcı olacaktır.

Anahtar Sözcükler: Aile planlaması; anne sağlığı; anne ve çocuk sağlığı merkezleri; çocuk sağlığı

Received/*Geliş* : 21.10.2024
Accepted/*Kabul*: 13.11.2024

DOI: 10.21673/anadoluklin.1571063

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INTRODUCTION

Maternal and child health is one of the most significant determinants of the health levels of countries. The implementation of health improvement activities and the provision of health counseling prior to birth play a pivotal role in fostering the growth of a healthy population (1). Family planning (FP) services seek to ensure that individuals make informed, safe, and healthy reproductive decisions (2). The individual's knowledge, attitudes and beliefs, health literacy level, access to health services, and the ability to use the FP method correctly and effectively are among the determining factors affecting the use of sexual and reproductive health (3,4).

FP enables individuals to have children when and as many children as they want, the timing of pregnancy, and prevention of unwanted pregnancies. In this way, maternal and child health can be protected and the health level of society can be improved (5). In 2022, while the frequency of contraception use by women on a global scale is 65%, the rate of meeting the FP need of women of reproductive age with modern methods is 77.5%. While the rate of meeting the FP needs with traditional methods (coitus interruptus-withdrawal, calendar, vaginal douching, abstinence) is 7%, the unmet FP need is more than 15%. (6,7). According to Türkiye Demographic and Health Survey (TDHS) 2018 data, the rate of married women in Türkiye using any FP method is 70%, the rate of modern FP method use is 49%, and the unmet FP need is around 12% (7).

Globally, there are over one million new cases of sexually transmitted infections (STIs) diagnosed daily, with 370 million new cases reported annually (8). In 2020, approximately 287,000 women died from preventable causes related to pregnancy, childbirth, or puerperium, 95% of which occurred in low- and middle-income countries (9,10). In the same year, the maternal mortality rate was recorded at 223 per 100,000, reflecting a 34% decrease since 2000 due to the expansion of family planning services (9,11). In 2022, the maternal mortality rate in Türkiye was 12.6 per 100,000 (12). The global objective is to reduce this figure to below 70 per 100,000 by 2030 (9,10). Furthermore, additional antenatal care is a crucial aspect of ensuring optimal maternal and infant health outcomes. As reported by the World Health Organization (WHO), one million pregnancies occur globally on a daily basis. Of these, one-quarter are unplanned, one-third are unwanted pregnancies, and 29% result in miscarriage. Unsafe abortions, responsible for 45% of miscarriages, are a leading cause of maternal mortality (4,13,14). In Türkiye, high fertility rates and risky pregnancies, particularly among women under 20 and over 35, increase the risk of miscarriage. This emphasizes the importance of expanding reproductive health and family planning services (15,16).

Türkiye has been pursuing an antinatalist population policy and developing reproductive health and FP services since 1965 (17). The Ministry of Health facilitates citizens' access to reproductive health services, primarily through the provision of primary healthcare services. Counseling and services pertaining to reproductive health are provided at all family health centers. Furthermore, individuals applying to community health centers and district health directorates are provided with free reproductive health and FP services by units previously known as Maternal-Child Health and Family Planning (MCHFP) and currently designated as Child-Adolescent-Woman and Reproductive Health (CAWRH). The objective of these services is to provide education and counseling on reproductive health and sexually transmitted diseases, to ensure planned pregnancy, to provide healthy pregnancy and delivery services, to apply appropriate FP methods, and to reduce maternal-infant mortality (18,19).

The extent of unmet need for family planning services and the lack of knowledge of women in need of services are not fully known in the context of family planning services (20,21). Furthermore, the effects of cultural and religious factors on family planning services represent an important area for research (22). Conversely, the organization of health services and service quality are significant factors influencing citizens' access to family planning services (23). The objective of this study was to comparatively evaluate the sociodemographic characteristics, fertility characteristics, contraceptive method used, and type of service requested, by those who applied to MCHFP services in a district of İstanbul in 2018-2019 and 2020.

METHODS

The study employed a descriptive research methodology The study population comprised individuals who had submitted applications to the Eyüpsultan MCHFP Centre between the 1st of January 2018 and the 31st of December 2020. A total of 1,600 applications were submitted to the Eyüpsultan MCHFP Centre between 2018 and 2020, seeking FP-related services. Only the first applications of individuals in the same year were included in the study, with 140 duplicate applications made by the same individuals in the same year excluded. A total of 1460 individuals remained for analysis, with 16 cases excluded due to incomplete records. Consequently, the records of 1444 individuals were examined retrospectively. The examination of the records enabled the evaluation of the services received by the individuals, their use of FP methods, their change in the FP method they used, and the variables affecting these situations. The data on the time of application, demographic characteristics (age, gender, educational status), fertility characteristics (number of pregnancies, number of children born, number of living children, number of miscarriages, number of living children), and contraception characteristics (FP method used in the last three months, reason for application, change in the FP method used) were evaluated.

Statistical analyses

The statistical analysis of the study was performed using the Statistical Package for the Social Sciences package program version 24.0 (SPSS Inc., Chicago, IL, USA). Numerical variables were expressed as mean ± standard deviation (median, minimum, maximum), while categorical variables were expressed as numbers and percentages. The chi-square test was employed to ascertain the alterations within the parameters and the discrepancies between the groups in accordance with their distribution characteristics. A p-value of less than 0.05 was regarded as indicative of a statistically significant result.

Ethics committee permission

Ethics committee permission for the research was obtained from İstanbul Medipol University Non-Interventional Clinical Research Ethics Committee (date: 31.08.2023, decision no: 689).

RESULTS

The mean age of the study group was 33.9 years, with an application rate of 46.2% among those aged 35 years and over. The distribution of age, education level, number of pregnancies, and live births of those who applied to the MCHFP Center to receive FP services in 2018-2019-2020 is shown in Table 1.

While 75.9% (1096) of the women who applied to the MCHFP Centre did not use any FP method prior to the application, they commenced the use of an FP method following the application. Table 2 presents the distribution of the FP method use status of applicants to the MCHFP Centre before and after the application, as well as the FP methods used and switched to.

The highest number of applications was made in the 29-34 and 35-40 age groups. The distribution of applicants to the MCHFP Centre according to age groups and educational level is presented in Table 3.

Among the applicants to the MCHFP Centre, the proportion of those who did not use any FP method in the last 3 months was higher than those using the other methods. Furthermore, the most preferred FP method was the IUD. The distribution of applicants to the MCHFP Centre by year according to their characteristics related to fertility and FP, is shown in Table 4.

The most preferred FP method among women in the study group was IUD, regardless of age or education level ($p < 0.05$). The distribution of the FP methods that the women who applied to the MCHFP Centre subsequently initiated use of after their application, according to their sociodemographic characteristics, is presented in Table 5.

DISCUSSION AND CONCLUSION

In our study, the majority of the applicants were in the 29-40 age group, representing more than 50% of the total sample. Furthermore, the preference for traditional contraceptive methods and shorter-acting contraceptive use in the group below the age of 29 may be related to the desire to have a child. It is noteworthy that when the average age of mothers in Türkiye (29.0 years) is taken into consideration, it can be surmised that those in the study group mostly applied for FP methods after having a child (24).

Table 1. Sociodemographic and fertility characteristics of people applying to Maternal Child Health and Family Planning centres in 2018-2019-2020

		2018	2019	2020	Total
Age (Mean ± SD)		33,99 ± 7,75	33,68 ± 7,22	34,64 ± 7,39	33.95 ± 7.44
Number of Pregnancy (Mean ± SD)		2,91 ± 1,48	2,73 ± 1,38	2,77 ± 1,48	2.80 ± 1.41
Number of Live Births (Mean ± SD)		2,35 ± 1,071	2,27 ± 1,02	2,33 ± 1,16	2.32 ± 1.03
Number of Living Children (Mean ± SD)		2,30 ± 1,00	2,24 ± 0,97	2,27 ± 1,08	2.28 ±0.98
Number of Miscarriages (Mean ± SD)		0,56 ± 0,87	0,46± 0,80	0,44 ± 0,74	0.49 ± 0.81
		n	n	n	n (%)
Number of pregnancy (n=1444)	0	5	6	4	15 (1)
	1	56	85	60	201 (13.9)
	2-4	320	459	281	1060 (73.4)
	5 and above	61	67	40	168 (11.6)
Live births (n=1444)	0	6	6	5	17 (1.2)
	1	71	114	73	258 (17.9)
	2-4	350	478	294	1122 (77.7)
	5 and above	15	19	13	47 (3.3)
Total		442 (30.6)	617 (42.7)	385 (26.7)	1444 (100)

SD: Standart deviation, n: Number, %: Percentage

Table 2. Descriptive characteristics of people applying to Maternal Child Health and Family Planning centres in 2018-2019-2020 regarding Family Planning

		2018	**2019**	**2020**	**Total**	
		n (%)	**n (%)**	**n (%)**	**n**	**%**
Use of FP Method (n=1444)	Former User	100 (22.6)	160 (25.9)	88 (22.9)	348	24.1
	New User	342 (77.4)	457 (74.1)	297 (77.1)	1096	75.9
FP method used for the last 3 months at the time of application (n=1444)	Injection	6 (1.4)	30 (4.9)	27 (7.0)	63	4.4
	Oral Contraceptive	18 (4.1)	37 (6.0)	21 (5.5)	76	5.3
	Traditional Methods	64 (14.5)	63 (10.2)	4 (1.0)	131	9.1
	Condom	67 (15.2)	70 (11.3)	11 (2.9)	148	10.2
	IUD	107 (24.2)	110 (17.8)	96 (24.9)	313	21.7
	Does not use any method	180 (40.7)	307 (49.8)	226 (58.7)	713	49.4
FP method passed after the application (n=1444)	Traditional Methods	0 (0.0)	0 (0.0)	0 (0.0)	0	0.0
	Oral Contraceptive	13 (2.9)	6 (1.0)	23 (6.0)	42	2.9
	Injection	8 (1.8)	35 (5.7)	37 (9.6)	80	5.5
	Condom	45 (10.2)	63 (10.2)	0 (0.0)	108	7.5
	Does not use any method	71 (16.1)	56 (9.1)	74 (19.2)	201	13.9
	IUD	305 (69.0)	457 (74.1)	201 (65.2)	1013	70.2
Status of participants' changes in FP methods after application to Maternal Child Health and Family Planning. (n=1444)	No change	37 (8.4)	61 (9.9)	60 (15.6)	158	10.9
	Switching from any FP method to not using an FP method	71 (16.1)	56 (9.1)	74 (19.2)	201	13.9
	Switching from not using any FP method to using any method	180 (40.7)	307 (49.8)	226 (58.7)	713	49.4
	Change in the FP method used	154 (34.8)	193 (31.2)	25 (6.5)	372	25.8

FP: Family Planning, IUD: Intrauterine Device, n: Number, %: Percentage

Table 3. Distribution of applicants to Maternal Child Health and Family Planning centres by age and educational background by years

	2018	2019	2020	p
Age (n:1442)				
17-22	21 (4.8%)	34 (5.5%)	17(4.4%)	
23-28	102 (23.1%)	133 (21.6%)	73 (19.0%)	0.350
29-34	110 (24.9%)	186 (30.1%)	99 (25.8%)	
35-40	114 (25.9%)	146 (23.7%)	111 (28.9%)	
41 and above	94 (21.3%)	118 (19.1%)	84 (21.9%)	
Education Status (n:1444)				
Below primary education	43 (9.7%)	43 (7.0%)	35 (9.1%)	
Primary education	171 (38.7%)	221 (35.8%)	139 (36.1%)	
Secondary Education	87 (19.7%)	105 (17.0%)	67 (17.4%)	0.294
High School	84 (19.0%)	153 (24.8%)	91 (23.6%)	
Higher School and Bachelor's Degree	57 (12.9%)	95 (15.4%)	53 (13.8%)	
Total	442 (30.6%)	617 (42.7%)	385 (26.7%)	

n: Number

The health level of societies, the socioeconomic level of individuals, the socio-cultural structure, the provision of health services, and citizens' access to health services all exert an influence on family planning preferences. These factors also shape the preferences of individuals in relation to traditional or modern methods of family planning. Furthermore, they influence the choice of long- or short-acting family planning methods, depending on the desire to have children. The difficulties encountered in accessing healthcare services during the pandemic may have led women to opt for more traditional methods and condoms that could be purchased easily from pharmacies. The proportion of women who switched to a contraceptive method in the absence of protection prior to its initiation was found to be the highest in 2020. This indicates that women continue to seek and apply FP methods despite the difficulties encountered in accessing FP services provided by the Ministry of Health due to the pandemic. The period of the COVID-19 pandemic saw a number of factors impede individuals' access to and use of FP services. These included quarantine practices, women's access to primary healthcare services, the organization of healthcare services focused on the treatment of COVID-19, and problems in the supply of healthcare products (25-27). Furthermore, the suboptimal utilization of FP services during the course of the COVID-19 pandemic has had a detrimental impact on women's health, increasing the risk of unintended pregnancy and abortion in suboptimal circumstances (28). In the context of the ongoing global pandemic, it is of paramount importance to ensure the continuity of essential reproductive health services, including FP, through the utilization of diverse methodologies, with no interruption (29). In extraordinary situations such as pandemics, innovative services such as telemedicine and community/home-based services can be applied for antenatal and postnatal care and FP services to reduce the risk of exposure of healthcare personnel and individuals to the disease and to alleviate the burden on the healthcare system (30,31).

The level of education attained by an individual has an impact on their ability to access health services, their preferences regarding family planning, and their utilization of specific family planning methods. Despite the fact that those with a low level of education are situated within the lower sociocultural stratum of society, there is evidence to suggest that their utilization of family planning methods may vary. Given that women with low socioeconomic status tend to have larger families, they may represent a demographic with a heightened need for family planning services. Conversely, those with a low level of education tend to have limited health literacy, which in turn makes it more challenging for them to access health services. The fact that women with low education levels in the research group have less knowledge about FP methods

Table 4. Characteristics of fertility and Family Planning of people applying to Maternal Child Health and Family Planning. centres

	2018	2019	2020	p
Pregnancy (n: 1444)				
0	5 (1.1%)	6 (1.0%)	4 (1.0%)	
1	56 (12.7%)	85 (13.8%)	60 (15.6%)	
2-4	320 (72.4%)	459 (74.4%)	281 (73.0%)	0.663
5 and above	61 (13.8%)	67 (10.9%)	40 (10.4%)	
Number of live births (n:1444)				
0	6 (1.4%)	6 (1.0%)	5 (1.3%)	
1	71 (16.1%)	114 (18.5%)	73 (19.0%)	
2-4	350 (79.2%)	478 (77.5%)	294 (76.4%)	0.929
5 and above	15 (3.4%)	19 (3.1%)	13 (3.4%)	
FP Usage				
Former User	100 (22.6%)	160 (25.9%)	88 (22.9%)	
New Usser	342 (77.4%)	457 (74.1%)	297 (77.1%)	0.371
FP method used in the last 3 months before application (n:1444)				
Injection	6_a (1.4%)	30_b (4.9%)	27_b (7.0%)	
Oral Contraceptive	18_a (4.1%)	37_a (6.0%)	21_a (5.5%)	
Traditional Methods	64_a (14.5%)	63_a (10.2%)	4_b (1.0%)	**0.000**
Condom	67_a (15.2%)	70_a (11.3%)	11_b (2.9%)	
IUD	107_a (24.2%)	110_b (17.8%)	96_a (24.9%)	
Does not use any method	180_a (40.7%)	307_b (49.8%)	226_c (58.7%)	
FP method passed after the application (n:1444)				
Injection Moulding	8_a (1.8%)	35_b (5.7%)	37_b (9.6%)	
Oral Contraceptive	$13_{a.b}$ (2.9%)	6_b (1.0%)	23_a (6.0%)	
Condom	45_a (10.2%)	63_a (10.2%)	0_b (0.0%)	**0.000**
IUD	$305_{a.b}$ (69.0%)	457_b (74.1%)	251_a (65.2%)	
Does not use any method	71_a (16.1%)	56_b (9.1%)	74_a (19.2%)	
Changes in the FP method used after the application				
No change	37_a (8.4%)	61_a (9.9%)	60_b (15.6%)	
Switching from any FP method to not using an FP method	71_a (16.1%)	56_b (9.1%)	74_a (19.2%)	
Switching from not using any FP method to using any method	180_a (40.7%)	307_b (49.8%)	226_c (58.7%)	**0.000**
Change in the FP method used	154_a (34.8%)	193_a (%31.2)	25_b (6.5%)	

FP: Family Planning, IUD: Intrauterine Device, a, b: Statements of groups with significant differences between them, n: Number, %: Percentage

Table 5. Distribution of Family Planning methods started to be used by the applicants to Maternal Child Health and Family Planning. centres in 2018-2019-2020 according to sociodemographic characteristics

	Injection	Condom	Oral Contraceptive	IUD	Does not use any FP method	p
Age (n: 1442)						
17-22	1_{a} (1.4%)	4_{a} (5.6%)	0_{a} (0.0%)	63_{a} (87.5%)	4_{a} (5.6%)	
23-28	19_{a} (6.2%)	21_{a} (6.8%)	8_{a} (2.6%)	227_{a} (73.7%)	33_{a} (10.7%)	
29-34	25_{a} (6.3%)	21_{a} (5.3%)	11_{a} (2.8%)	284_{a} (71.9%)	54_{a} (13.7%)	**0.003**
35-40	22_{a} (5.9%)	32_{a} (8.6%)	13_{a} (3.5%)	255_{a} (68.7%)	49_{a} (13.2%)	
41 and above	$12_{a.b}$ (4.1%)	$30_{a.b}$ (10.1%)	$10_{a.b}$ (3.4%)	183_{b} (61.8%)	61_{a} (20.6%)	
Education Status (n:1444)						
Below primary education	6_{a} (5.0%)	9_{a} (7.4%)	0_{a} (0.0%)	88_{a} (72.7%)	18_{a} (14.9%)	
Primary education	21_{a} (4.0%)	46_{a} (8.7%)	14_{a} (2.6%)	363_{a} (68.4%)	87_{a} (16.4%)	
Secondary Education	13_{a} (5.0%)	20_{a} (7.7%)	8_{a} (3.1%)	182_{a} (70.3%)	36_{a} (13.9%)	**0.003**
High School	18_{a} (5.5%)	24_{a} (7.3%)	8_{a} (2.4%)	233_{a} (71.0%)	45_{a} (13.7%)	
Higher School and Bachelor's Degree	22_{a} (10.7%)	9_{b} (4.4%)	$12_{a.c}$ (5.9%)	$147_{b.c}$ (71.7%)	15_{b} (7.3%)	
Number of pregnancy (n:1444)						
0	$1_{a.b.c}$ (6.7%)	$4_{c.d}$ (26.7%)	6_{d} (40.0%)	1_{b} (6.7%)	$3_{a.c}$ (20.0%)	
1	18_{a} (9.0%)	11_{a} (5.5%)	7_{a} (3.5%)	131_{a} (65.2%)	34_{a} (16.9%)	**0.000**
2-4	55_{a} (5.2%)	76_{a} (7.2%)	29_{a} (2.7%)	755_{a} (71.2%)	145_{a} (13.7%)	
5 and above	6_{a} (3.6%)	17_{a} (10.1%)	0_{a} (0.0%)	126_{a} (75.0%)	19_{a} (11.3%)	

FP: Family Planning, IUD: Intrauterine Device a, b: Statements of groups with significant differences between them, n: Number, %: Percentage

may be related to the low rate of use. Furthermore, the fact that women with low educational levels were the most frequent applicants to the MCHFP unit in the study group may be related to the fact that this group prefers primary healthcare services where FP services are provided free of charge and access to these healthcare services is easier. The high rate of IUD use among women with a low level of education suggests that they have many children and wish to prefer long-term FP. In Türkiye, the reasons for women's preference for FP were determined to be reliability, cost-effectiveness, and accessibility, with minimal side effects (32). In another study conducted in Türkiye, the number of pregnancies and miscarriage rates of women with low education levels were found to be higher (33). It is acknowledged that the decision to utilize FP may not be straightforward for women, particularly given the multitude of factors that influence this decision. These factors include age, beliefs, educational and economic status, sociocultural values, thoughts about FP, and whether or not the woman has children (34-36). A meta-analysis conducted in Ethiopia determined the unmet need for FP to be between 26.52% and 36.39%. The determinants of this need were found to be the age at first marriage, the low educational level of the woman and her husband, and couples not discussing FP with each other (2). In a further meta-analysis, it was demonstrated that the unmet need for FP in sub-Saharan Africa was influenced by a number of factors, including the age of the woman, educational level, consent of the husband, accessibility of health facilities, and service provision (23).

The number of pregnancies and the number of children may influence women's preferences with regard to family planning. The average number of pregnancies and children in Türkiye varies across regions (33). In the study group, women who had experienced between two and four pregnancies and live births were more likely to submit applications. This suggests that families have an attitude about having as many children as they can care for, which leads them to apply for FP services. Furthermore, women with two or more pregnancies were more likely to opt for long-term contraceptive methods such as intrauterine de-

Table 6: Various family planning studies conducted in Türkiye

	Modern method	Traditional method	No method used
Değer at al. Maternal Child Health and Family Planning	86,1%	13,9%	0%
Mayda at al. (MCHFP)	82,6%	17,4%	0%
Doğru at al. (Hospital)	28,8%	26,7%	45,5%
Tekgündüz at al. (Hospital)	25,3%	10,0%	64,7%
Yücel at al. (Cross-sectional)	71,3%	26,5%	12,2%
Altuntaş at al. (Cross-sectional)	53,2%	19%	27,8%
Turkey Demographic and Health Survey - 2018	48,9%	20,9%	30,2%

vices (IUDs). In 2019 and 2020, women who had no pregnancy preferred oral contraceptives (OCs), while women who had two or more pregnancies preferred FP methods such as IUD. This indicates that women with no prior pregnancy prefer the FP method that they can discontinue more readily when they change their decision to have a child.

The majority of applicants to MCHFP centers express a desire to utilize a modern family planning method. Some of them apply to alter their family planning method. Indeed, the findings of our study indicate that the majority (75.9%) of applicants to MCHFP centers sought to utilize a novel FP method. In the global context, the proportion of women in the reproductive age group who have met their FP needs through modern contraceptive methods is 77.5%, while the unmet FP need is more than 15%, according to data from the 2018 TDHS. The rate of married women in Türkiye who use any FP method is 70%, while the rate of modern FP method use is 49.0%. The unmet FP need in all women is approximately 12.0% (6,7). In our study, the rate of use of any traditional or modern FP method by the applicants was 50.6%, which is below the average for Türkiye, while the rate of use of modern FP method after application was 86.1%, which is above the rates of use of any FP and modern FP method in Türkiye according to TDHS-2018 data. All of the FP methods used after application to our MCHFP unit are modern FP methods. The proportion of individuals who did not utilize any FP method following their visit to the MCHFP unit was 13.9%. A meta-analysis conducted on the FP attitudes of women in Türkiye revealed that the IUD (19.1%-25.2%), pill (13.9%-50.9%), and condom (13.2%-47.3%) were the most preferred modern methods, respectively. In contrast, withdrawal (9.1%-61.3%) was more commonly adopted among traditional methods. Furthermore, women with higher educational levels, those with social security, and working women exhibited more positive attitudes towards FP method use. (5).

Various FP studies conducted in Türkiye with community-based and different health facilities are shown in Table 6.

In community-based studies conducted with applicants to health facilities, the utilization of family planning methods exhibits variability according to the characteristics of the research group. In MCHFP centers, modern FP services, including IUDs, condoms and OCs, are provided with greater frequency. It may therefore be anticipated that the rate of uptake of modern FP methods among applicants to these centres will be high. This is because those who apply to MCHFP centers have already made the decision to use modern FP methods. Indeed, the prevalence of modern FP methods (82.6-86.1%) was observed to be higher in the studies conducted with those who applied to MCHFP centers in the table compared to the TDHS-2018 (15,35). Given that the majority of individuals seeking care at the hospital are there due to other health concerns, the utilization of FP methods may differ from the overall population average. As evidenced by the present study, the prevalence of modern FP method use (25.3-28.8%) was observed to be relatively low in comparison to other studies and the TDHS-2018. Furthermore, the proportion of hospital applicants who do not utilize any method (45.5-64.7%) is markedly higher than the TDHS data (15,37,38). In community-based cross-sectional surveys, appropriate sample selection allows for a more accurate representation of the status of FP method use in the community. As evi-

denced in the community-based FP studies presented in Table 6, the rate of modern FP method use (53.2-71.3%) exhibits variability, though it is lower than in our study and closer to the TDHS 2018 data (15,32,39).

FP is one of the most prominent primary healthcare practices. It is of the utmost importance to inform and guide women who require this service and to organize the necessary health system for them to receive this service. This is essential for improving the health level of society (40). It has been observed that disadvantaged groups, such as migrants and young people, have low levels of knowledge about and use of modern FP methods. This is due to cost and access to services (41,42). A study conducted in Şanlıurfa revealed that the prevalence of modern contraceptive use was 51.7%, with the most common reason for non-use being the unwillingness of the spouse (43). It is crucial to enhance the involvement of men as both users and beneficiaries to ensure the success of FP services (44). Furthermore, the provision of FP services in accordance with the privacy of individuals and without discrimination is an effective means of increasing individuals' access to services and FP preferences (45).

The unmet need for FP represents a significant public health concern, underscoring the inability of women to access this service (7). The quality and inclusiveness of FP services can be enhanced by increasing the level of awareness of the general public, particularly healthcare professionals, supporting those who require FP and identifying issues related to reproductive health (46,47). Furthermore, the diversification of contraceptive methods will facilitate the utilization of services by increasing the likelihood of individuals being able to make an informed choice. Furthermore, evidence indicates that informing and training activities targeting the general public, such as mass media, email, and text messages, have a positive effect on the utilization of FP services (48).

The provision of reproductive health and FP services is contingent upon the extent of coverage and utilization of the service (49). In Türkiye, the priority problems related to FP may include the following: the level of social awareness about FP varies significantly between regions; the social role of women; and the fact that all individuals do not have equal chances in accessing health services due to the low level of health literacy in our society (50). Conversely, person-centered sexual and reproductive health services that respect individuals' preferences, needs, and values and enable them to take responsibility for their own sexual and reproductive health are of critical importance for all women worldwide to benefit from these services (51).

Strengths and limitations of the study

The study has both strengths and limitations. It contributes to the existing body of literature on reproductive health and FP, which is an important determinant of maternal and child health and must be met. The fact that the study was conducted in a unit affiliated with the Ministry of Health is significant in that it provides citizens with the opportunity to evaluate the procurement of services from a public institution in the field of FP. Conversely, the fact that the study population consisted of those who had applied to the health facility represents a limitation. Furthermore, the fact that the study was conducted in a single center necessitates caution in generalizing the results to the wider population with regard to family planning.

The findings of our study indicate that the prevalence of modern FP methods among those who had undergone the application procedure was 86.1%. The preference for FP methods among applicants to the MCHFP center was found to be associated with their level of education, age group and number of pregnancies ($p < 0.05$).

The provision of support to individuals in the field of FP and the implementation of awareness-raising activities within the community will facilitate the accessibility of FP services and enhance the attitudes and behaviors of individuals towards FP. Furthermore, studies aimed at enhancing the health literacy of the population, expanding the range of contraceptive options, and adopting an individual-centered approach will facilitate individuals' access to and utilization of contraceptive services.

Conflict-of-interest and financial disclosure

The authors declare that they have no conflict of interest to disclose. The authors also declare that they did not receive any financial support for the study.

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