

## **Usage of family planning method and related social-cultural factors in the Western Mediterranean sea region of Turkey.**

**Kurtuluş Öngel<sup>1</sup>, Utku Eser<sup>2</sup>, Ebru Katırcı<sup>3</sup>**

<sup>1</sup>Department of Family Medicine, Izmir Katip Celebi University, Izmir, Aegean Region, Turkey

<sup>2</sup>IKCU Atatürk Education and Research Hospital Directorate, Izmir, Aegean Region, Turkey

<sup>3</sup>Eğirdir Family Health Center, Isparta, Mediterranean Region, Turkey

### **Abstract**

**Objective:** This study was conducted to search the women's contraceptive preferences, to explore the effects of socioeconomic and cultural differences, and to evaluate the success of the family planning in this region.

**Material and methods:** This study is a cross sectional study that was conducted in first step health organizations in the city center of Isparta, Mediterranean region, Turkey. For sampling process, stratified sampling was planned. After determining how many women were going to be involved in our project from each health clinic/family health center, using systematic sampling method, chasing cards were selected for the women between 15-49 years old. Through systematic sampling method, 681 women chasing cards were examined. Data were tabulated by Statistical Package for Social Sciences (SPSS) program 9.05 software programmes.

**Results:** The most common method used by 160 women (23.5%) was found to be condom, following with 153 women (22.5%) intrauterine device (IUD) and with 131 women (19.2%) ineffective (traditional) method was found to be used. 152 women (22.3%) did not use any prophylactic method. The majority (42%) of families were observed to have two kids. It was observed that a large number, 550 (80.8%) do not work. According to last pregnancy information, it can be said that abortus number is effective on total pregnancy number and in the study, as the abortus number increased the total pregnancy number increased (p-value=0.000). If the education level of the spouse was low, in terms of the method used, either no method or an inefficient method (p-value=0.008) was used.

**Conclusion:** Not using any family planning method or using an inefficient method is an important public health problem for Turkey, as it's for the other developing countries. This problem was found in high ratios for the study group too.

**Keywords:** Abortus, Family planning, Mother death rate.

*Accepted on September 26, 2016*

### **Introduction**

Family planning is an application that enhances people's lives and welfare of the savior. It prevents unintended pregnancies that may lead to maternal death, and reduces pregnancies that might result in infants being born with problems [1].

In Turkey, mother death rate has a high level of 55/100.000 with alive birth [2]. In the study that was conducted by Ministry of Health, World Health Organization and Hacettepe University Department of Public Health in 1986; mother death rate was found 284/100.000 for Kahramanmaraş city and 94/100.000 for Adyaman city and 'bleeding' was detected as the most common cause of mother death. At the same time, 90% of the mother deaths were estimated as preventable. As it was mentioned in the United Nations Children's Fund (UNICEF) report about Mothers and Childrens' Health

Analysis in Turkey in 1996; mother death speed was 79/100.000 for 1986.

Every year, more than half million women die because of the pregnancy and birth problems and leave more than one million kids without mother.

In different regions of Turkey, the preferred contraception methods differ [3]. The reasons for that may be, first, individuals come from different cultural, socioeconomic and religious characteristic; and second, the knowledge of the health employees and the difference in possibilities of giving family planning training.

Usage of family planning services in developing countries have been found to avert unintended pregnancies, reduce maternal and child mortality, however, it's usage still remains low [4]. This study was conducted to search the women's contraceptive

preferences, to explore the effects of socioeconomic and cultural differences. At the same time, as a result of this study the effective factors for the mother death rate will be determined and the ones that can be prevented will be introduced.

## Materials and Methods

This study was deemed appropriate by the academic board of the department of Family Medicine and approved by the ethics committee. It was detected as a thesis project with the number 1398-TU-06. Legal permission from the provincial health directorate was received.

This is a cross sectional study that was conducted in first division health organizations in the city center of Isparta, Mediterranean region, Turkey. In medical research, a cross sectional study analyses data collected from a population or a representative subset. They are descriptive studies that aim to provide data on the entire population under study.

Subsequent to determining the numbers of women who were going to be involved in the project from each health clinic/family health centre, through systematic sampling method, 681 women chasing cards that belong to an age group between 15-49 years were examined. Systematic sampling is a statistical method involving the selection of elements from an

ordered sampling frame. The most common form of systematic sampling is an equal-probability method. In this approach, progression through the list is treated circularly, with a return to the top once the end of the list is passed.

Data were collected with the standard 15-49 age women's chasing cards. These cards were created by the Ministry of Health and were used in all of the primary health centers. The 15-49 age women's chasing cards was made up in 2 sections:

- Sociodemographic information: Age, education level, occupation, social assurance, knowledge on motherhood, immigration conditions, biography, generation history, systematic illnesses, disability, information on the last pregnancy, and spouse's socio-cultural information.
- The second part of the card included, from the point of family planning method the current method they are using, frequency of monitoring, and the information on risky aspects.

The investigation's analysis was done at SPSS 9.05 statistical program. For the analysis; descriptive statistics, chi-square and independent two groups averages t-test were used. The level of meaningfulness was taken into consideration in two ways and p was accepted as  $p < 0.05$ .

## Results

**Table 1.** Some demographic data related with the investigation group.

Characteristics	Using ineffective method and not using any method		Total		$\chi^2$	P <sup>3</sup>
	Number	%	Number	%		
Birthday	1980-1990	62	21.9	76	6.74	P=0.112
	1970-1979	107	37.9	164		
	1960-1969	86	30.4	135		
	<1960	27	9.8	22		
Education	Under education age	0	0	1	7.805	P=0.871
	Not educated	9	3.1	7		
	Educated	1	0.3	2		
	Primary	155	39.2	192		
	Secondary	30	10.6	41		
	High	61	21.6	94		
Occupation	Working	41	14.7	77	4.23	P=0.116
	Not working	237	84.9	312		
Insurance type <sup>4</sup>	No insurance	21	9.8	16	15.146	p=0.011
	Officials Union	58	27.1	130		
	Social insurance society	98	45.7	117		
	Independent association	26	12.1	36		

	Green Card	11	0.5	14	4.5		
Immigration status	Immigrated	34	50.7	33	32	5.952	P=0.051
	Non-immigrated	33	49.6	70	68		
Personel history	Positive	11	12.5	6	4.7	4.593	P=1.05
	Negative	77	87.5	122	95.3		
Family history	Positive	2		4		0.002	P=0.907
	Negative	44		85			
Consangious marriage	Positive	10	4.7	12	3.6	0.312	P=0.925
	Negative	207	95.3	317	96.4		
Spouse's education level	Under education age	0	0	1	0	17.138	P=0.010
	Not educated	2	0.8	0	0		
	Educated	1	0.4	1	0.2		
	Primary	116	47	127	34.6		
	Secondary	33	13.7	43	11.7		
	High	53	21.5	119	32.4		
Systemic disease	Yes	6	5.6	5	3.3	2.121	P=0.831
	No	102	94.4	180	96.7		

<sup>1</sup>Line percentage, <sup>2</sup>Column percentage, <sup>3</sup>Chi square test between two groups

<sup>4</sup>Officials Union: Officials insurance society, Social insurance society: Social insurance society for workers, Independent association: Independent occupational insurance society, Green Card: governmental insurance for poor.

It is noteworthy that, 550 women participated in the study (80.8%) do not work and the biggest majority of the women (93%) had their social security.

When the immigration of women was examined, it was revealed that on 511 of the forms (75%) that part was not filled. Since it was impossible to access the necessary data on immigration, that information could not be examined quantitatively.

According to the study, as the age increases; the total pregnancy number ( $r=0.314$ ,  $p=0.000$ ), the number of living children ( $r=0.387$ ,  $p=0.000$ ), and the abortus number was ( $p=0.018$ ) increasing.

In women who were examined according to the data, the findings showed parallelism with the increase at alive birth and the age increase (Somers'  $d=0.384$ ,  $p=0.000$ ), the total number of pregnancies (Somers'  $d=0.619$ ,  $p=0.000$ ), the pill or condom usage ( $p=0.002$ ), by examination frequency ( $p=0.000$ ) and the risk degree of abortus ( $p=0.015$ ).

The other meaningful parameter that was stated on the mothers' information cards was that the dead birth number. The dead birth number, was more in low educated group ( $p=0.000$ ) and in the group that was not working ( $p=0.000$ ). As the number of dead birth increased, the total pregnancy number increased ( $p=0.001$ ).

In terms of the data on abortus, among the women, it was determined that 75% had never have abortus, while 10.9% had an abortus once. The number of abortus was found to be high in those who had low education level ( $p=0.007$ ) and who were not working ( $p=0.005$ ). As the abortus number increased the total pregnancy number increased ( $p=0.000$ ).

According to the number of dead children, 3.2% of the families compose the largest group. It was found that when both the education level of the mother ( $p=0.001$ ) and the father ( $p=0.000$ ) decreased, the ration of dead children increased. It was examined that the number of dead children had increased ( $p=0.000$ ) in those who did not work.

On the cards of the women who were between the ages 15-49, one of the possible factors that might have affected the contraceptive method was the education level of the spouse. According to that, the education level of the spouses displayed similarities to each other (Somers  $d=0.508$ ,  $p=0.000$ ), and as the education level of the spouse decreased the total pregnancy number increased ( $p=0.024$ ). One of the other important findings of the study was if the education level of the spouse was low, in terms of the method used, either no method was used or they used an inefficient method ( $p=0.008$ ). Another interesting finding was that as the education level of the spouse decreased monitoring frequencies increased ( $p=0.000$ ).

When the kinship of the couples was examined from the cards of the women whose ages were between 15-49, mainly no relationship was found (76.9%). In the crosswise method, it was significant not to find any kinship among the higher educated couples ( $p=0.008$ ).

On the second part of our study, the family planning method used by the women, the reason for not using the family planning method, and consequently, observation frequencies were analyzed.

When the family planning method women used was examined (Table 2) the most common method used by 160 women (23.5%) was found to be condom, following with 153 women (22.5%) IUD and with 131 women (19.2%) ineffective (traditional) method was found to be used. A remarkable finding was that 152 women (22.3%) did not use any prophylactic method. When the ratios of using ineffective method and not using any method were examined together, the result displayed a huge number of 283 women (41.5%).

Moreover, the reasons for not using any methods were investigated. Only 224 women (35.8%) mentioned the reason for not using any method. Pregnancy and breastfeeding were the leading reasons among 163 women (23.9%). Being statistically significant, the further age ( $>48$ ) was found. As the patient's age increased using the method they desire also increased ( $p=0.000$ ). When the observation frequencies of health clinics among women were examined, the monthly ratios were almost the same and no significant difference was observed.

**Table 2.** Dissociation of the investigation group according to family planning method.

	Number	Percentage
Oral contraceptive	20	2.9
Condom	160	23.5
Injection	3	0.4
Intrauterine device	153	22.5
Sterilization	33	4.8
Other methods	1	0.1
Ineffective method	131	19.2
Not using any methods	152	22.3
No answer	28	4.1
TOTAL	681	100

## Discussion

When a literature research was done, the most comprehensive study on family planning method was found to be made in Nigeria [5-7]. In Nigeria Nnamdi Azikiwe University Hospital, a study was conducted on 230 pregnant women about the contraceptive method they used. In this study, it was examined that the most commonly used method was the calendar method

95 (28.4%). However, in our study the most common method was using condom 23.5%. In a newer study from Kathmandu; majority of the participants 363 (90.8%) were aware of contraceptive usage and maximum number of participants (60.35%) had used modern contraceptives in the past [8]. These results showed that in Turkey, the method that is frequently used is a healthier method. Besides; when considering immigration status to Turkey recently, especially from Syria, in particular the use of modern methods need to be more prevalent in people who have immigrated.

There are two comprehensive studies conducted in the rural regions of Bangladesh to determine the relationship between the usage of contraceptive and socio-demographic factors and its relationship with the family planning [9,10]. In one of the studies, the information of the 8500 married women who were ready to reproduce was studied. The ratio of contraception usage was found to be 57%, which was lower than the contraceptive frequency detected in our study and it was claimed that the education level is not effective on contraceptive usage [9]. In a different study from 23 universities in 22 countries; different factors were determined. Of the total sample of 16979 undergraduate university students, of those who had been sexually active, 42.6% reported never using contraceptives in the past 12 months. In multivariate regression analysis, among both men and women, younger age, religious affiliation, intrinsic religiosity, and sexually protective behaviour were associated with contraceptive non-use [11]. Especially religious factors were not investigated in the existent study and the religion is known to be very effective in this regard. It must be investigated with further studies.

Between the years 1991 and 1992, in Angola, 7246 women were encouraged to use modern contraceptive method, and among 7182 women this method was successful. Hence, as a result of all those encouragements, except from using outmoded methods, the uneducated section of Angola started to use depo-provera; therefore, an inclination toward modern methods in contraception has been partly started. While the uneducated section preferred depo-provera, the educated region preferred pills or IUD [12]. In Isparta city center, when taking the ratio of using ineffective method and not using any method is 41.5% and the ratio of all injection methods is 4%, these kinds of encouragements are thought to be beneficial for our region. But these methods are not well known and they should be introduced to the public through various trainings.

In Serbia, where the degree of the development is higher than other countries, in a study that was conducted in 2007, it was declared that half of the patients who were being studied did not use any contraceptive method [13]. When we compare our study with this, it was found that the ratio of the contraceptive method usage has a higher value. IUDs are the most common used modern contraceptive method in Turkey [14]. Besides; in a different study from Turkey, ratio for using coitus interruptus as a family planning method was found to be 57% [15].

The longitudinal patterns for contraceptive usage were examined in different studies; and it differs from country to

country. High proportion of Japanese uses condoms; for example in one study, the ratio of condom usage was found 83.4% [16]. In the study conducted by Tonkelaar et al. on 1466 German women population, the condom usage was found not to be preferred since it creates a difference in the quality of sexual relations [17]. On the contrary, the condom usage was found to be 23.5% and this value was found to have the highest ratio among the contraceptive methods used in our region.

## Conclusion

At the conclusion of all the gathered data, the family planning is found to be compatible with all the other studies on that issue, but the old techniques are used wide spread. We believe that the target audience should be encouraged to use the modern techniques.

Every year, 500.000 women in the world die due to the problems in pregnancy, delivery or in the period of confinement. 99% of these are in the developing countries. The aim of the laws and the duties of the family doctors are: to prevent undesirable pregnancies, to have couples acquire the healthy ways of contraceptives, and for sterile couples, to help them have children. To inform people in the cases of contraceptive methods, new consultancy strategies should be developed; family planning programs should be restructured to correct the false prejudices.

## References

1. Speizer IS, Corroon M, Calhoun L, Lance P, Montana L, Nanda P, Guilkey D. Demand generation activities and modern contraceptive use in urban areas of four countries: a longitudinal evaluation. *Glob Health Sci Pract* 2014; 2: 410-426.
2. Unluoglu I, Ayranci U. Turkey in need of family medicine. *Primary Care* 2003; 3: 988-994.
3. Turan JM, Bulut A, Nalbant H. The quality of family planning services in two low-income districts of Istanbul. *Nufusbil Derg* 1997; 19: 3-24.
4. Apanga PA, Adam MA. Factors influencing the uptake of family planning services in the Talensi District, Ghana. *Pan Afr Med J* 2015; 20: 10.
5. Adinma JI, Agbai AO, Nwosu BO. Contraceptive choices among Nigerian women attending an antenatal clinic. *Adv Contracept* 1998; 14: 131-145.
6. Lapidu OO, Otolurin EO, Oladini F, Konje JC. Factors determining the choice of contraceptive methods at the Family Planning Clinic, University College Hospital, Ibadan, Nigeria. *Br J Fam Plan* 1998; 24: 107-110.
7. Ajaero CK, Odimegwu C, Ajaero ID, Nwachukwu CA. Access to mass media messages, and use of family planning in Nigeria: a spatio-demographic analysis from the 2013 DHS. *BMC Public Health* 2016; 16: 427.
8. Bajracharya A. Knowledge, Attitude and Practice of Contraception among Postpartum Women Attending Kathmandu Medical College Teaching Hospital. *Kathmandu Univ Med J (KUMJ)* 2015; 13: 292-297.
9. Khan MA. Factors affecting use of contraception in Matlab, Bangladesh. *J Biosoc Sci* 1996; 28: 265-279.
10. Kabir M, Uddin MM, Chowdhury SR, Ahmed T. Characteristics of users of traditional contraceptive methods in Bangladesh. *J Biosoc Sci* 1986; 18: 23-33.
11. Peltzer K, Pengpid S. Contraceptive non-use and associated factors among university students in 22 countries. *Afr Health Sci* 2015; 15: 1056-1064.
12. Carvalho A, Laudari C, Marini M, Faundes A. Characteristics of contraceptive acceptors in Luanda, Angola. *Afr J Fertil Sexual Reprod Heal* 1996; 1: 109-114.
13. Grujic I, Grujic Z. The primary health care and its role in the reproduction of the population of Vojvodina. *Med Pregl* 2007; 60: 168-172.
14. Deveer R, Deveer M, Sözen H, Üstün YE, Akbaba E, Beydilli H, Tetik K, Sarıkaya E. Infection Frequency among Intrauterine Copper T-380A Contraceptive Users. *Acta Medica Mediterranea* 2013; 29: 489-492.
15. Yikilkan H, Dilbaz B, Kestel Z. Assessment of the patients who applied to Family Planning unit for legal abortion. *Smyrna Tip Dergisi* 2012; 2: 10-14.
16. Yoshida H, Sakamoto H, Leslie A, Takahashi O, Tsuboi S, et al. Contraception in Japan: Current trends. *Contraception* 2016; 93: 475-477.
17. den Tonkelaar D, Oddens BJ. Factors influencing women's satisfaction with birth control methods. *Eur J Contracept Reprod Health Care* 2001; 6: 153-158.

## \*Correspondence to

Kurtulus Ongel  
Department Head of Family Medicine  
Izmir Katip Celebi University  
Izmir  
Turkey