



## The use of family planning methods by Somali women between the ages of 15-49 living in Turkey and their plans and attitudes towards these methods

Saida Abukar AWEİS<sup>1</sup>, Namık BİLİCİ<sup>2</sup>, Mustafa CENGİZ<sup>\*3</sup>, Rıfat ERTEKİN<sup>4</sup>, Adnan AYHANCI<sup>5</sup>

ORCID: 0000-0003-1517-4890; 0000-0002-4320-3567; 0000-0002-6925-8371; 0000-0002-8041-8030; 0000-0003-4866-9814

<sup>1</sup> Midwifery Department, Graduate Education Institute, Karabük University, 78050 Karabük, Türkiye

<sup>2</sup> Department of Medical Pharmacology, Faculty of Medicine, Karabük University, 78050 Karabük, Türkiye

<sup>3</sup> Department of Elementary Education, Faculty of Education, Siirt University, 56056 Siirt, Türkiye

<sup>4</sup> Department of Histology and Embryology, Eskişehir Osmangazi University, 26120 Eskişehir, Türkiye

<sup>5</sup> Department of Biology, Faculty of Arts and Science, Eskişehir Osmangazi University, 26120 Eskişehir, Türkiye

### Abstract

Family planning (FP): individuals consciously plan the birth interval and regulate its timing. For FP, this effort requires resources such as drugs and devices and specific methods. This scientific research investigated the use of FP methods by Somali women aged 15-49 living in Turkey. Women were interviewed face to-face in 15 provinces with a survey consisting of 60 questions. According to the results of our scientific research, Somali women's cultures, traditions, social lifestyles, incomes, and religious beliefs have changed the use of FP methods at different levels. The pregnancy rate at a child age (<18) is 20%. 1/3 of women do not use any FP method. Belief, tradition, culture, tribe and family pressure are the biggest obstacles to FP. Income status changes the level of FP. As a result, proper planning of education and organized health delivery can reduce Somali women's FP approach and, therefore, obstetric problems.

**Keywords:** family planning, women's health, somali women living in Türkiye, birth control, women's obstetric knowledge level

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### Türkiye'de yaşayan 15-49 yaş arasındaki Somalili kadınların aile planlaması yöntemlerini kullanımı bu yöntemlere yönelik planları ve tutumları

#### Özet

Aile planlaması (FP); bireylerin doğum aralığını planlamak ve zamanlamasını düzenlemek üzere bilinçli çaba göstermeleridir. FP için bu çaba ilaç ve cihaz gibi kaynaklara ve belirli yöntemlere ihtiyaç duyar. Bu bilimsel araştırmada Türkiye'de yaşayan 15-49 yaş arası Somalili kadınların FP yöntemlerini kullanımları araştırıldı. 60 sorudan oluşan bir anket ile 15 vilayette kadınlarla yüz yüze görüşüldü. Bilimsel araştırmamızın sonuçlarına göre, Somalili kadınların kültürleri, gelenekleri, sosyal yaşam tarzları, gelirleri ve dini inançları değişik düzeylerde FP yöntemlerinin kullanımını değiştirmektedir. Çocuk yaşta (<18) gebelik oranı %20 düzeyindedir. Kadınların 1/3'ü hiçbir FP yöntemini kullanmamaktadır. İnanç, gelenek, kültür, kabile ve aile baskısı FP'nin önündeki en büyük engellerdir. Gelir durumu FP düzeyini değiştirmektedir. Sonuç olarak eğitim ve organize sağlık sunumunun doğru planlanması Somalili kadınların FP yaklaşımını dolayısıyla obstetrik sorunları azaltabilir.

**Anahtar kelimeler:** aile planlaması, kadın sağlığı, Türkiye'de yaşayan Somalili kadınlar, doğum kontrolü, kadınların obstetrik bilgi düzeyi

### 1. Introduction

According to the World Health Organization, FP is "the effort of individuals to plan and give birth to the desired number of children and to decide freely on the spacing and timing of birth." Approximately 75 million pregnancies worldwide are unplanned. This figure corresponds to 22% of total pregnancies. It is estimated that 61% of unplanned pregnancies are terminated because they are unwanted pregnancies. Since there is no complete data on the couples' relationships, these figures are only estimates. [1]. More than 200 million women in the world do not have access to modern birth control. FP practice can be more or less restricted due to socio-cultural realities, economic problems, psychological norms, lack of education, misinformation and beliefs. [2]. In

\* Corresponding author / Haberleşmeden sorumlu yazar: Tel.: +95302186609; Fax.: +904842231998; E-mail: m.cendiz@siirt.edu.tr

underdeveloped societies, the pressure of patriarchal tradition, fear of social stigma, family management, myths about contraceptives, and traditional cultural interpretations are obstacles to FP. [3-5]. FP methods that can be used for a long time, such as long-acting family planning (LAFP) methods such as implants and extended-release drugs, can be a good solution for women's empowerment in reducing poverty, supporting economic growth, increasing female productivity and reducing fertility. [6, 7]. FP practices are subject to tradition, belief and tribal pressure as socio-economic factors reinforce the cultural loyalty of the demographic structure.[8]. Socio-economic factors, good health provision and education, can overcome this demographic blunting. [2]. Worldwide population growth has declined from its historic peak of 2.1% per year in the late 1960s to 1.7% today. However, Sub-Saharan Africa still faces the world's highest fertility and population growth rates.

While the population growth rate is becoming negative in some countries, the increase rate is high in African countries. As of 2021, the population growth rate is negative in Lithuania, Belarus, the Russian Federation, Romania, Estonia, Hungary, Armenia, Poland, Croatia, Germany, the United States, the Czech Republic and Japan. On the contrary, the population growth rate in countries such as Somalia, Djibouti, Ethiopia, Gambia, Mali and Chad is 5-8% [9, 10]. Somalia has the highest population growth rate (6.9-7.2%) [11].

## 2. Materials and methods

A critical questionnaire consisting of 60 questions was prepared for Somali women living in 15 provinces in Turkey. Ethics committee approval was obtained. Exclusions have been set. A power analysis of the research was done. A two-sample T-Test Power Analysis was used for power analysis. For statistical accuracy to be 99%,  $n=174$  was determined as the ideal limit. For the group sample size, 99% accuracy was determined to detect a difference of 1.1 between the two groups, 87. Estimated group standard deviations of 1.9 and 1.6 to 2.2 were considered significant. A level of 0.05000 was accepted as a reference using a two-sided two-sample t-test. Statistically, 99.99% accuracy was determined for a total  $n \geq 174$  (Machin, Campbell). The research was also done as  $n=196$ . The study was studied as  $n=211$ . The prepared questionnaire was conducted face-to-face with the subjects in 15 provinces. In addition, he was sent to 209 universities (131 state, 11 technical, two fine arts, and 65 private and foundation universities) by obtaining permission through the Rectorate of Karabuk University. The answers are tabulated. Abstentions and non-answers were selected. Chi-square tests were applied to the continuous quantitative variables, and parametric tests were applied to the normally distributed data. Data with abnormal distribution were determined by non-parametric tests (Kolmogorov-Smirnov and Shapiro-Wilk).

## 3. Results

The average marriage duration of Somali individuals living in Turkey is 13.39 years. It generally refers to the young population. The current population average living in a household is 4.65 people, which is similar to the average family member of the Somali population living in developed countries [22]. The participants' marriage ages (mean: 20.63) and pregnancy ages (mean: 20.34) are very close to each other. The pressure of traditional culture sees the baby as the first product of marriage. For this reason, children should be requested as soon as possible without wasting any time. As a result, there is a very short period between the age of marriage and the age of first pregnancy ( $p < 0.05$ ). The study results related to the job and income status of families of Somali women living in Turkey are given in Figure 1.

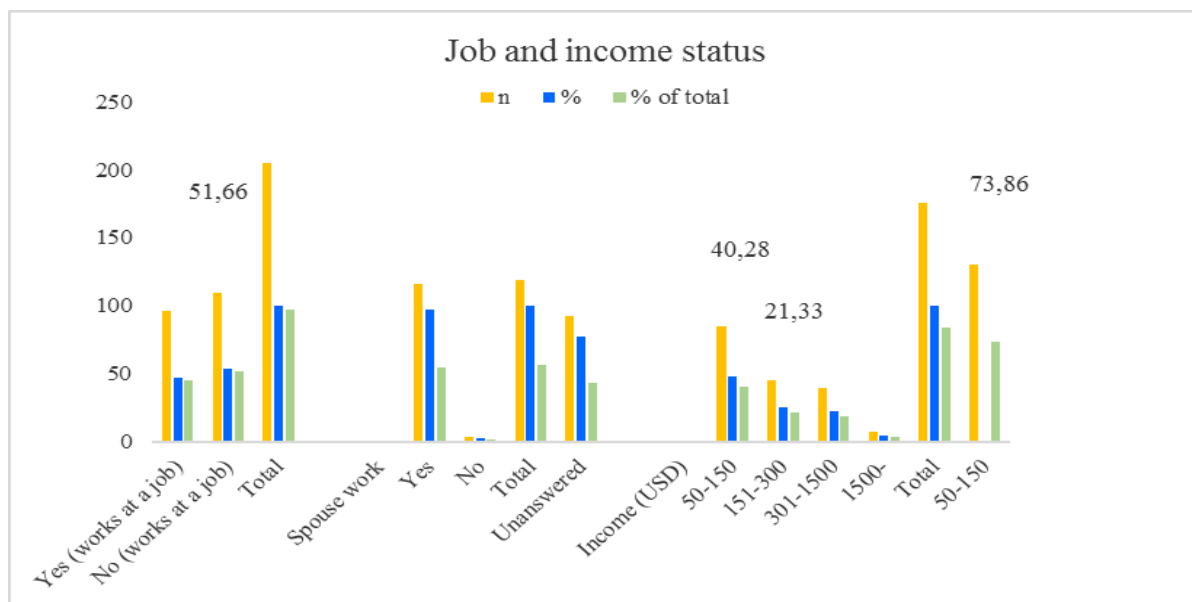


Figure 1. Job and income status of families. (Working and income situations of Somali families living in Turkey. The income levels of families are insufficient and unstable. More than half of them do not have a job. Only the spouses of 54.98% of the participants have a job. 40.28% of the participants declared their total family income 50-150 dollars. The rate of those whose family income is between 150-300 dollars is 21.33%. Families with these two lower income levels correspond to 73.86% of the participants. Total family income is only around \$50-\$300. n: The number of participants, %: % of respondents among participants, % of total: Rate of respondents among all participants)

Figure 2 indicates the women's attitudes towards pregnancy, birth interval, and abortion status of Somali women living in Turkey. The same figure indicate also the involuntary abortions and planned pregnancies. Based on the survey from this study the pregnancy age and status of the participants of Somali women living in Turkey has been shown in Figure 3. In addition, the study results related to participants about FP information resources, FP opposition reason, attitude about FP, the reason for abandoned FP as well as FP satisfaction, husband's FP claim status, and FP training with his wife were presented in Table 1.

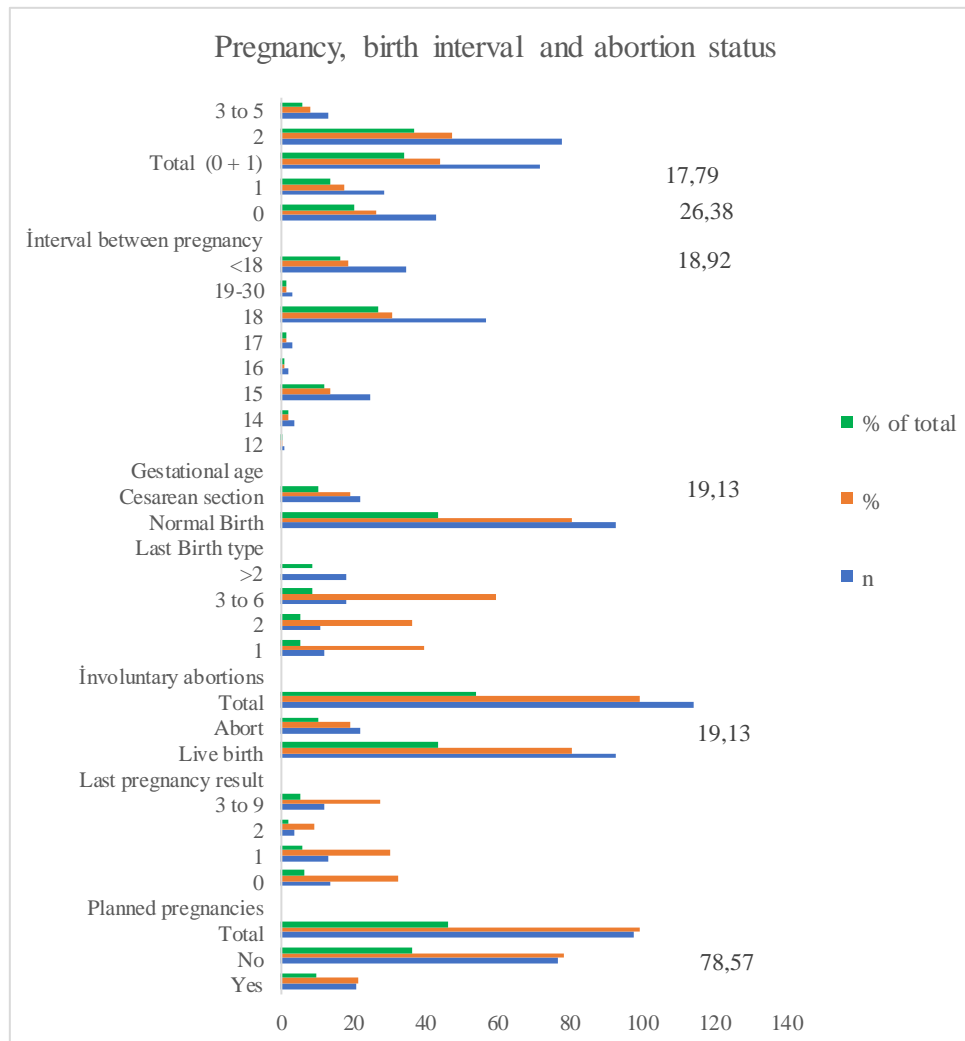


Figure 2. Women's attitudes towards pregnancy, birth interval, and abortion status (All Somali women living in Turkey have had at least one pregnancy. Those whose interval between two pregnancies is less than 18 months is 20%. It is a partially accepted culture that the maternal age should be less than 18 for a healthy pregnancy (18.92%). One in every five women we met became pregnant as a child (<18). Gestational age is in childhood. Caesarean section is also available for birth at the same rate. The abortion and abortion rate is also quite high (19.13%). The majority of pregnancies (78.57%) occurred without FP. Pregnancy with FP is only 1/5. n: The number of participants, %: % of respondents among participants, % of total: Rate of respondents among all participants)

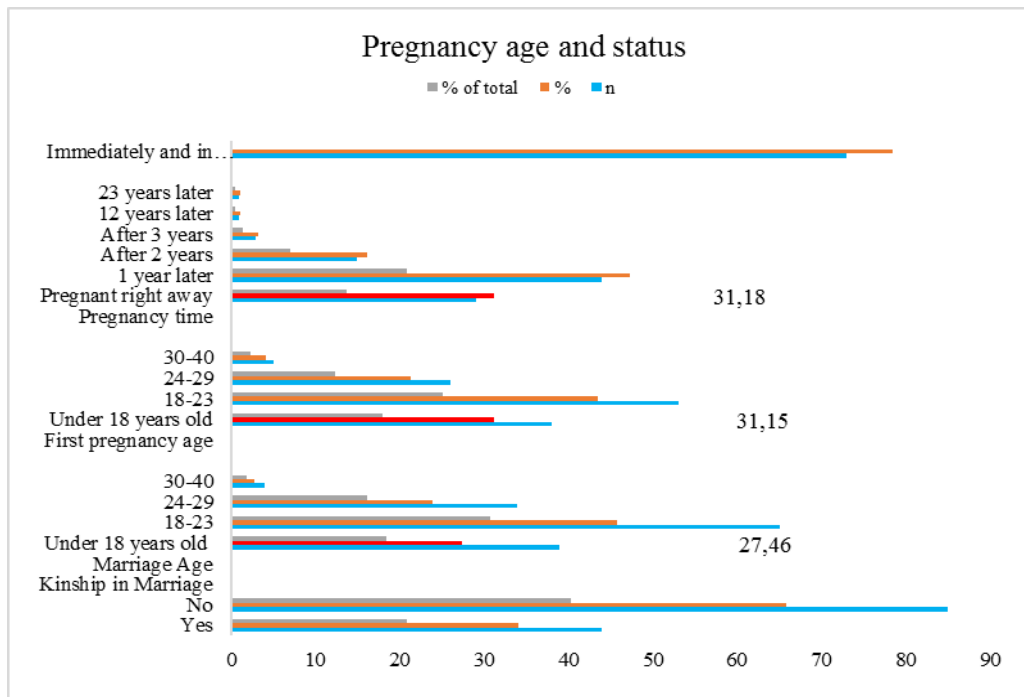


Figure 3. Pregnancy age and status of the participants (The kinship level of Somali women living in Turkey with their spouses is 34.11%. Pregnancy during childhood is 1/3 of those who experience pregnancy at least once. The age of first pregnancy is usually between 18 and 29 years old. The rate of those who got pregnant again immediately after birth is 31.18%. The pregnancy rate within one year after birth is 47.31%. The rate of those with two years between births is 16.13%. Accordingly, the rate of those who got pregnant again until one year after birth (0-12 months) is 78.49%. n: The number of participants, %: % of respondents among participants, % of total: Rate of respondents among all participants)

Table 1. Attitudes and behaviors about family planning

FP information resource	%	Why FP opposition	%
Other-Health personal-Internet-Relatives-neighbours	5	Shame	22,81
Newspaper-Magazine-Book- Internet-Health personnel	32	Spouse refuse	8,77
Social media	2	Pregnancy wants	14,91
Internet-Other	4	Haram (religiously forbidden)	15,79
Health personnel	9	There is no reason	35,09
Radio-TV, Internet	1	Disapprove pregnancy	1,75
Relative-Neighbor-Newspaper-Magazine-Book,	47	Pregnant	0,88
<b>Attitude about FP</b>	<b>%</b>	<b>Shame + Haram + No reason +Wants pregnancy</b>	<b>88,6</b>
Harms the unborn child	3,16	<b>Why abandoned FP?</b>	<b>%</b>
No idea	36,08	Menstrual irregularity	16,67
Sin	10,76	Pain and ache	11,11
Not good	12,66	Husband decision	11,11
Against	20,89	Pregnancy claim	16,67
It is not healthy	14,56	Increased bleeding	11,11
Negative -Total	62,03	No reason	27,78
Positive Total	1,9	No idea	5,56
<b>FP satisfaction</b>		<b>Husband's FP claim status</b>	<b>%</b>
Menstrual problems	7,69	Desire	53,33
Headache	5,13	Not desire	46,67
No idea	10,26	<b>FP training with his wife</b>	<b>%</b>
Positive	76,92	Yes	13,71
		No	86,79

#### 4. Conclusions and discussion

This scientific research is the first detailed scientific research in Turkey. This study was done with an acceptable accuracy of 99.99%. The age difference between spouses is significant. The rate of those with a 10-16 year age gap is 10%. This situation is much lower in developed societies. The average family size, including siblings, is 7.42. There is no family smaller than five people. 20.21% of the participants are primary school graduates, 13.30% are secondary school graduates, and 515.43 are high school graduates. The rest are university graduates. There are many participants whose reason for living in Turkey is education. Therefore, the education level is quite low. The majority (60.20%) are married. Being divorced is hidden because it is considered shameful and a sin. Although the average age is expressed as 30.4 in a study conducted on refugees in Kampala the average age of individuals whose purpose of coming to Turkey is education and trade is 33.96 [12]. This difference can be interpreted as the difference between forced asylum and the choice of Somali refugees for commercial and educational purposes. Studies indicate that the average age of marriage is 18[13] or 18-19 [14]. Our research shows that marriages are most common between the ages of 18-23. Early marriage is routine in Somalia. According to the SHDS (The Somali Health and Demographic Survey), 36% of women aged 20-24 were married at 18. A woman who only marries at the age of 35 is almost absent. These data of SHDS exactly match our research [15]. Our research is consistent with this study.

Although previous studies found family size to be more than six or even 9 to 10 people, this number was found to be 5.13 in our study. Although the average family size is high in Somalia, the average number of family members going to developed countries for education and job opportunities is relatively low. Education awareness, the burden of population density, individuals' demand for a better life, and gaining digital and universal awareness through communication are the factors that cause the decrease in family size. [13].

In our study, unlike SHDS, the fertility rate was lower. Here, the number of children, the absence of social status, and the level of socio-cultural development are important. Although it is stated in the research that Somali women are mostly (62%)[16] or 73% (OCHA, 2023)[17] are housewives [16] or more than half of them do not practice any profession, the rate of homemakers in our research is 36%, and most of the rest are professionals. This situation; is the demand for integration into the socio-cultural structure of developed countries. Studies have found that 60.4% of women have knowledge of FP, and 38.6% of women have no knowledge of FP[3, 18]. Our study determined that 65.9% had knowledge of FP, while 28.4% had no knowledge of FP. Somali women consider their FP information confidential. However, as the level of education increases, this shyness ends. Reasons for not using any of the family planning methods in the study: Wanting to have a child is due to 6.6% pressure from her husband, 31.0% to avoid side effects of medications, and 8.9% to religious belief, culture and tradition. The rate of those who do not use FP for other reasons is low (36.3%).[18]. In our study, the spouse's rejection rate (6.6%) was lower than the others (12.8%). Socio-cultural integration in developed countries can also explain this situation. Reasons for not using FP in studies conducted on women in Norway and Somalia: For those living in Norway, 23.9% are religious, 42.3% do not want a spouse, and 30.6% want to give birth. It was determined that 76.1% of women in Somalia do not use it for religious reasons, 57.7% do not use it because their husbands do not want it, and 69.4% do not use it because they want to get pregnant. [19].

In Somalia, births determine self-confidence and status in society. Since the family type is patriarchal, it is considered shameful to discuss FP methods. Therefore, it is proportionally higher [20]. Although it was stated that any FP method was used in 38.0% and not used in 61.1% [21], in our study, the use was only 15.2%, and no FP method was used in the remaining 70.6%. We investigated whether the cost of the FP method poses a threat to method choice. It is clear that the cost of the FP method affects the choice (81.48%) ( $p < 0.05$ ) because they purchase the AP method they use (91.11%) by paying money ( $p < 0.05$ ). Although they did not specify the procurement method, the rate of those who stated that they obtained it somehow was 4.44%. The price rate not being determined by the FP method is 18.52%. Therefore, price is the determining factor when choosing a method. Some data indicate that 52% of those using modern methods are procuring from public institutions and organizations (TNSA, 2018). In our country, most participants benefit from free FP opportunities from health institutions. 10.4% of the participants stated that they also received AP education consultancy. Again, 9.4% of the participants chose the method they used with their spouses. These rates are well below the averages of developed countries. Almost 8/10 of women believe that talking about private family matters, such as FP, is not well received in Somali culture and tradition.

The rate of participants abandoning any FP method is low (7.98%). There is a very high tendency to continue using the FP method they use (92.02%). The FP method may be abandoned due to menstrual irregularity (16.67%) and pain (11.11%). The main reasons for abandoning the FP method in different studies are menstrual irregularity (16.67%) and desire to get pregnant (16.67%). Abandonment of FP due to pain and ache complaints, partner's reluctance and

increased bleeding is 11.11%. They abandoned the current FP method (38%) because they wanted to get pregnant, (19%) because they could not use the method successfully, (9%) because it had side effects, and (7%) because they wanted more.

In our study, the average age of women and their spouses, family size, and number of households are parallel with Somali population data and Somali immigrants migrating to other developed countries.

Our country's average income level of Somali individuals is around 150 USD. Excluding seven families (3.32%) with monthly income above 1500 USD, the lower limit of the average household income is 150 USD. In this situation, the monthly earnings of Somali individuals living in Turkey are below the 2022 minimum wage. Therefore, although the lives of Somali families are well above Somali standards, they are below the minimum wage in Turkey. This income is below the hunger threshold of an average family of 4 in Turkey. Age at marriage is associated with the period from the first pregnancy to the second pregnancy ( $p=0.02$ ). Because the biggest expectation from marriage is a baby. There is a tight statistical connection between the number of children conceived by planning ( $p=0.03$ ) and the number of miscarriages ( $p=0.041$ ). Because in unplanned pregnancies, the interval between two children is less than two years. Age at marriage is statistically significant and related to the number of people in the household ( $p=0.007$ ). Because in the Somali family, Tradition and patriarchy are a measure of life.

First pregnancy after marriage: It is associated with the number of births ( $p=0.008$ ), number of siblings ( $p=0.045$ ) and number of children ( $p=0.041$ ). Having the first pregnancy right after marriage shortens the time between two pregnancies ( $p=0.015$ ). The reason for this is that women are a gender that is fertile from a young age ( $<18$ ), and the more they give birth, the more prestigious they are. It was determined that there was a statistically strong relationship between the number of births a woman had and her attitude towards not getting pregnant after a certain age ( $p=0.001$ ). An opposite relationship was found between the number of births and FP ( $p=0.875 >0.05$ ). The number of births is higher because they do not internalize FP ( $p=0.57 >0.05$ ). That means that the rate of unintended miscarriage is high in women who do not set a period between their first pregnancy and birth and do not plan to have children. The statistical significance between them ( $p = 0.036$ ) confirms these conclusions. Using any FP method has nothing to do with the age at marriage, the time from the first pregnancy to marriage, how many pregnancies they had, how many children they had, the number of births, the age of their spouse, or their age. On the other hand, the family planning method used has a strong relationship with the age of the first pregnancy ( $p=0.004$ ), the mother's awareness of how old she should be for a healthy pregnancy ( $p=0.001$ ), and her attitude towards the period between two pregnancies ( $p=0.009$ ). For this reason, Somali women who have been using the FP method for a certain period have an awareness about the age of first pregnancy and the age at which they should not become pregnant. There is a statistically significant relationship between the age of Somali women living in Turkey and involuntary abortion(s) ( $P=0.005$ ). This situation can be interpreted as the fact that education cannot adequately solve traditional culture and traditions.

The time between the first pregnancy and the second pregnancy, the number of planned children, the duration of FP use and the number of abortions are independent of the age of the partner ( $p>0.005$ ). There is a significant relationship between a healthy pregnancy and the partner's age ( $p=0.001$ ) and the time between two pregnancies ( $p=0.009$ ). This explains that the spouses' FP attitude is traditional and has stayed the same.

The time between marriage and two pregnancies, the woman's age ( $p=0.007$ ), number of siblings, number of households, mother's healthy gestational age ( $p=0.003$ ), partner's age ( $p=0.003$ ), the time between two pregnancies ( $p=0.035$ ) and the number of households ( $p=0.001$ ) are closely related to the woman's family size. This situation reflects the socio-cultural structure from which the cultural and traditional family model originates. Clearly, women's education cannot change the family structure.

Marriage duration; regardless of the length of time they use any FP method and the number of children they plan to have. However, the relationship between income level ( $p=0.013$ ), number of abortions ( $p=0.009$ ), healthy gestational age of the mother ( $p=0.001$ ) and the time between two pregnancies ( $p=0.006$ ) is significant. This is because household income and awareness are more important than culture and traditions when using FP methods. It must be admitted that not every Somali woman has the opportunity to receive an education in a developed country like Türkiye.

Income level is directly related to the age of the spouse ( $p = 0.02$ ), the number of planned children ( $p = 0.004$ ), the duration of marriage ( $p = 0.013$ ) and the attitude at which age one should get pregnant. This; It directly affects a healthy pregnancy ( $p=0.033$ ). Household welfare level: It affects the obstetric awareness of families and the behaviours shaped by this awareness.

The number of households is closely related to the healthy gestational age limit ( $p=0.001$ ). The period between two pregnancies ( $p=0.012$ ), age at marriage ( $p=0.007$ ), and age at first pregnancy ( $p=0.031$ ) have a significant

correlation with the number of people in the household. Family size of Somali women living in Turkey changes FP education and perception.

### In conclusion

There is a significant difference ( $p=0.041$ ) between a woman's age at marriage and her unintentional abortions. Similarly, there is a close relationship between age at first pregnancy and unwanted miscarriage ( $p=0.015$ ). The woman's age ( $p=0.05$ ) and number of births ( $p=0.036$ ) are associated with involuntary miscarriage. Likewise, there is a close statistical relationship between the duration of marriage, the number of children, the woman's age, the time between two pregnancies and the perception of the time between unwanted abortions ( $p=0.009$ ).

Due to the prevalence of early and child marriages, the failure to obtain accurate information about birth from health personnel such as midwives and nurses after marriage seems to be the main reason for this situation.

The mother's age for a healthy pregnancy and the duration of any family planning method is directly related to the number of years the spouses have been married and how many people live in the house and have a very high statistical value ( $p = 0.001$ ). Three important conclusions can be drawn from this:

1. It is essential that the spouse is of mature age for marriage and has sufficient health knowledge.
2. The experience gained during the years of marriage is of great importance for the continuation of the marriage and the health of children and parents.
3. It is vital that family planning methods can be received correctly and satisfactorily from health professionals and applied to the marriage process.

The rate of those who do not use FP because they do not want children is 8.1%. Those who do not use it due to peer pressure and embarrassment are 12.8%. 4.7% do not want to get pregnant. He does not use 1% as per his belief. 19% want to avoid specifying the reason. Due to the cultural differences between the countries and women's focus on education and working to improve themselves, the rate of those who do not use AP due to their desire to give birth is higher in our study. Since the first pregnancy occurs at the same time as marriage due to the culture, traditions and customs of Somali women, it does not seem possible to use family planning methods for the first child or to harmonize the knowledge, attitudes and behaviors of the mother and father. Spouses are together for a healthy pregnancy. The fact that one in every five married women is under the age of 18, the rate of pharaoh type (type-III) mutilation is over 97%, lack of nutrition, hygiene, sanitation, lack of access to clean water and sewer infrastructure make both birth and postpartum care difficult. This situation creates a vital problem not only for the mother but also for the newborn baby. The lack of health infrastructure and provision and the inadequacy of health personnel (midwives, nurses, doctors, etc.) should also be added to this. Therefore, although it is not impossible, it is extremely difficult for a young girl growing up in Somalia to know family planning, the methods used, to develop attitudes and to reflect the results of this in her behavior. The main reason we are in our country is to improve cultural knowledge, skills and attitudes, especially health. The average duration between two pregnancies is 1.42 years (17 months). The time between two pregnancies is inversely proportional to the level of education. The pregnancy period under one and a half years of age is generally considered to be an impossible period in terms of pregnancy health, family planning services, and adequate and effective health care. Although they are better than their spouses in terms of education at the undergraduate level, they are close to each other at primary, secondary and high school levels. It can be interpreted as an understanding of educational awareness for women. As the level of education increases, it is inevitable for FP presentation to be accurate and effective. Seeing women's education as a hope can be considered as a very important parameter. The number of unemployed men is quite low, and women are mostly housewives.

Lack of health insurance (73.9%) means that they cannot benefit from FP services, which include health services such as planning, monitoring, preventing pregnancy, and intervening in problems during pregnancy. Therefore, FP usage is directly affected. The rate of consanguineous marriages is lower. Since individuals studying in Turkey are above a certain economic level, their socio-cultural perceptions have changed. Despite this change, the FP methods known and used are classical and traditional, and 1/3 of the society is unaware of FP. Spouses' interest in FP is low (19.8%). Information; It was obtained from sources such as relatives, neighbors, friends, newspapers, radio, television and the internet. Therefore, the information is weak, insecure and insufficient.

It is traditionally considered rude to express an opinion about FP. FP is seen as unhealthy, harmful to pregnancy, has side effects, is not in line with traditional culture, is sinful, and is a practice.

The rate (<1%) of those who state that family planning is a feasible and good thing is very low ( $p<0.05$ ). However, satisfaction with using any family planning method is quite high (96.7%). The rate of discontinuation of all

family planning methods used is quite low (5.7%). However; After the participants came to Turkey, their spouses' views on FP changed, their opposition to FP decreased, and their demands for FP increased. This contradiction can be described as follows: They are Somalis with their culture of life and imagination. However, they are like citizens of a developed country in terms of physical appearance, education and professional skills.

Anti-FP belief criteria are less influential than culture, tradition, tribal pressure, and money. This alone is an improvement. Even though they receive information about any FP method from healthcare professionals after coming to Turkey, the rate of those who are dissatisfied can be much higher. The situation of their wives is similar. If every developed country could provide free health education services to immigrant women, a butterfly effect could be created for citizens of underdeveloped countries. It is clear that 73.9% do not have health insurance, and they cannot benefit from the FP, which covers planning, monitoring or preventing pregnancy and intervening in problems during pregnancy. The rate of consanguineous marriages is lower among Somali women living in Turkey. Since individuals educated in Turkey are above a certain economic level, their socio-cultural perceptions have changed. Despite this change, the AP methods that are known and used are classical and traditional. Additionally, 1/3 of women are still unaware of FP.

Spouses' interest in FP is low (19.8%). FP information was obtained from relatives, neighbours, friends, newspapers, radio-television and the Internet. This information needs to be more robust, more secure and sufficient. It is traditionally considered rude to express an opinion about FP. It is widely believed that FP is unhealthy and harmful to pregnancy. FP for them: It is a practice that has side effects, is incompatible with traditional culture, and is considered a sin.

The rate (<1%) of those who state that family planning is a feasible and good practice is shallow ( $p < 0.05$ ). On the other hand, satisfaction with using any family planning method is quite high (96.7%). The rate of abandoning all family planning methods is also meagre (5.7%). Participant spouses' opinions about FP changed after they came to Turkey. Their resistance to FP has decreased, and their demands have increased. This contradiction can be explained as follows: They are Somalis with their culture of life and imagination. However, they are like citizens of a developed country regarding physical appearance, education, and professional skills. Anti-FP belief criteria are less influential than culture, tradition, tribal pressure, and money. This alone is an improvement. The situation of their wives is similar. If every developed country could provide accessible health education services to immigrant women, a butterfly effect could be created for citizens of underdeveloped countries.

A significant ( $p = 0.048$ ) relationship exists between the age at first pregnancy and the number of children they plan. There is a high correlation ( $p = 0.004$ ) between age at first pregnancy, duration of family planning use and how many years they have used family planning. FP is directly proportional to awareness, culture and economic development.

This is because Somali women in Turkey receive complete FP services. A statistically significant ( $p = 0.016$ ) relationship exists between the duration of pregnancy after the first pregnancy and the number of pregnancies. On the other hand, there is a highly significant ( $p = 0.015$ ) relationship between the age at first pregnancy and the number of unintentional miscarriages. Child marriages and the short period between two pregnancies can be blamed for abortion. On the other hand, there is no significant difference between pregnancy and number of planned children, duration of family planning use and number of siblings. Receiving FP information and services free of charge in Turkey has changed perceptions.

The age at first pregnancy ( $p = 0.048$ ) and the time between two pregnancies ( $p = 0.05$ ) were statistically significant; this was the mother's last pregnancy. The age at which a woman can become pregnant is independent of the woman's age, length of marriage and the age of her husband. However, there is a high statistical significance ( $p = 0.004$ ) between the planned number of children and income status. There is a close relationship between the time taken for the first pregnancy after marriage and the number of births ( $p = 0.008$ ). This situation arises from the identification of women with "birth", which comes from the culture and traditions of Somali women. There is a significant relationship between the number of children of Somali women in Turkey and the age at conception ( $p = 0.001$ ). It can be clearly understood how important the first pregnancy is. Therefore, the first birth after marriage, which is based on socio-cultural traditions, is for the woman's social status. The attitude is this: A woman is fertile with her feminine existence. Therefore, there is almost no age limit for a healthy pregnancy.

In terms of education and profession, developed countries, especially the United Nations, EU, FAO, World Bank and World Health Organization, should organize programs that encourage joint organizations, associations and cooperatives that will enable women to participate in working life.



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## References

- [1] Simmons, R. G., & Jennings, V. (2020). Fertility awareness-based methods of family planning. *Best Practice & Research Clinical Obstetrics & Gynaecology*, 66, 68-82.
- [2] Dadras, O., Nakayama, T., Kihara, M., Ono-Kihara, M., & Dadras, F. (2022). Intimate partner violence and unmet need for family planning in Afghan women: the implication for policy and practice. *Reproductive health*, 19(1), 1-9.
- [3] Royer, P. A., Olson, L. M., Jackson, B., Weber, L. S., Gawron, L., Sanders, J. N., & Turok, D. K. (2020). “In Africa, there was no family planning. Every year you just give birth”: Family planning knowledge, attitudes, and practices among Somali and Congolese refugee women after resettlement to the United States. *Qualitative health research*, 30(3), 391.
- [4] Schultz, C., Larrea, N., Celada, M., & Heinrichs, G. (2018). A qualitative assessment of community attitudes and barriers to family planning use in the Trifinio region of southwest Guatemala. *Maternal and Child Health Journal*, 22, 461-466.
- [5] Gonie, A., Wudneh, A., Nigatu, D., & Dendir, Z. (2018). Determinants of family planning use among married women in bale eco-region, Southeast Ethiopia: a community based study. *BMC women's health*, 18(1), 1-10.
- [6] Ivanova, O., Rai, M., & Kemigisha, E. (2018). A systematic review of sexual and reproductive health knowledge, experiences and access to services among refugee, migrant and displaced girls and young women in Africa. *International journal of environmental research and public health*, 15(8), 1583.
- [7] Gebremariam, K., Assefa, D., & Weldegebreal, F. (2016). Prevalence and associated factors of female genital cutting among young adult females in Jigjiga district, eastern Ethiopia: a cross-sectional mixed study. *International journal of women's health*, 357-365.
- [8] Cleland, J. G., Ndugwa, R. P., & Zulu, E. M. (2011). Family planning in sub-Saharan Africa: progress or stagnation?. *Bulletin of the World Health Organization*, 89, 137-143.
- [9] Amos, M. (2019). Contraceptive method choice and spousal communication: Examining the effect of family planning method using an instrumental variable approach. *Sexual & Reproductive Healthcare*, 22, 100458.
- [10] Akinbode, S. O., Okuneye, P. A., & Onyeukwu, C. O. (2022). Inequality, population growth, and hunger in Sub-Saharan Africa. *SN Social Sciences*, 2(11), 250.
- [11] Assefa, L., Shasho, Z., Kasaye, H. K., Tesa, E., Turi, E., & Fekadu, G. (2021). Men's involvement in family planning service utilization among married men in Kondala district, western Ethiopia: a community-based comparative cross-sectional study. *Contraception and Reproductive Medicine*, 6(1), 16.
- [12] Abdulahi, M., Kakaire, O., & Namusoke, F. (2020). Determinants of modern contraceptive use among married Somali women living in Kampala; a cross sectional survey. *Reproductive Health*, 17(1), 1-9..
- [13] Ahmed, A. A., Mohamed, A. A., Guled, I. A., Elamin, H. M., & Abou-Zeid, A. H. (2014). Knowledge translation in Africa for 21st century integrative biology: The “know-do gap” in family planning with contraceptive use among Somali women. *Omic: a journal of integrative biology*, 18(11), 696-704..
- [14] Agbemenu, K., Auerbach, S., Murshid, N. S., Shelton, J., & Amutah-Onukagha, N. (2019). Reproductive health outcomes in African refugee women: a comparative study. *Journal of Women's Health*, 28(6), 785-793.
- [15] D'Exelle B, Ringdal C. Women's use of family planning services: An experiment on the husband's involvement. *Journal of Development Economics*. 2022;158:102915.

- [16] Ahmed, Z., Atallahjan, A., Gaffey, M. F., Osman, M., Umutoni, C., Bhutta, Z. A., & Dalmar, A. A. (2020). Understanding the factors affecting the humanitarian health and nutrition response for women and children in Somalia since 2000: a case study. *Conflict and Health, 14*, 1-15.
- [17] World Health Organization. (2022). Country cooperation strategy for WHO and Somalia 2021–2025.
- [18] Yoonis, A. (2018). Assessment of the Magnitude and Determinants of Unmet Need for Family Planning Among Currently Married Women in Reproductive Age in Hargeisa, Somaliland. *Int J Soc Sci Humanit Res, 6*(4), 1128-43.
- [19] Jalu, M. T., Ahmed, A., Hashi, A., & Tekilu, A. (2019). Exploring barriers to reproductive, maternal, child and neonatal (RMNCH) health-seeking behaviors in Somali region, Ethiopia. *PLoS one, 14*(3), e0212227.
- [20] Barrow, A. (2020). A survey on prevalence and knowledge of family planning among women of childbearing age in the provincial settings of the gambia: a descriptive cross-sectional study. *Advances in preventive medicine, 2020*, 1-12..
- [21] Omar, A. A., Abdirisak, D. (2022). Knowledge and practice of family planning methods among the married women of reproductive age group attending SOS hospital in Mogadishu Somalia. *Turkish Journal of Health Science and Life, 5*(2), 62-68.
- [22] Ackerson, K., & Zielinski, R. (2017). Factors influencing use of family planning in women living in crisis affected areas of Sub-Saharan Africa: A review of the literature. *Midwifery, 54*, 35-60.