Research Article
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VIEWS OF TURKISH AND SYRIAN REFUGEE WOMEN WHO ARE FROM TWO DIFFERENT CULTURES ON TUBAL LIGATION
İKİ FARKLI KÜLTÜRDE SAHİP OLAN TÜRK VE SURİYELİ KADINLARIN TUBAL LİGASYON HAKKINDA GÖRÜŞLERİNİN İNCELENMESİ

Seygül Donmez1, Süreyya Gümüşsoy2, Serap Hatice Koçak3

1 Muğla Sıtkı Koçman University Institute of Health Sciences Department of Nursing
2 Ege University Atatürk Health Care Vocational School
3 Gaziantep University Institute of Health Sciences Department of Nursing

Yazıma Adresi / Correspondence:
Seygül Dönmez (e-mail: donmezsevgul@gmail.com)

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Öz
Amaç: Tubal ligasyon, çiftler için en etkili ve en güvenilir olan planlaması yöntemlerinden biri olmasına rağmen, bu yöntemle kabulü toplumdan topluma değişiklik göstermekle ve bazı medikal, sosyo-ekonomik, dini ve kültürel nedenlerden dolayı kullanımı reddedilebilmektedir. Araştırma, Türk ve Suriyeli kadınların tubal ligasyon hakkında bilgi ve tutumlarını belirlemek amacıyla yapılmıştır. 

Materyal ve Metot: Araştırıma, Türkiye'nin güneydoğusunda postpartum servisi'nde doğum yapan 420 Türk ve Suriyeli kadın ile tanımlayıcı ve kesitsel olarak yapılmıştır. Araştırmada veri toplama araçları olarak "Tanılama Formu" kullanılmıştır.

Bulgular: Türk kadınların %32.10'u, Suriyeli kadınların %46.80'ni tüplerin bağlatılmasının günah olduğunu; Türk kadınların %22.80'n, Suriyeli kadınların %37.60'nı, tüplerin bağlatılmasının kadına aile hayatında otorite kaybetmeceğini; Türk kadınların %22.80'n, Suriyeli kadınların %43.90'nı tüplerin bağlatılmasının cinsel hayatı olumsuz etkileyeceğini; Türk kadınların %20.90'n, Suriyeli kadınların %36.10'u tüplerin bağlatılmasının yasaklanması gerektiğini; Türk kadınların %60.40'ı, Suriyeli kadınların %45.90'nı tüplerin bağlatılmasının güvenilir bir yöntem olduğunu ve Türk kadınların %34.40'ı, Suriyeli kadınların %48.30'u bir kadının çok çocuğunun olmasının kadına toplumda güç ve statü kazandırdığını düşündükleri saplanmıştır (p<0,05).

Sonuç: Çalışmanın sonucunda kadınların tubal ligasyon hakkında yetersiz bilgiye sahip olduğu, Suriyeli kadınların Türk kadınlarından tubal ligasyon hakkında daha fazla olumsuz tutuma sahip olduğu belirlenmiştir. Bulgularımız kültürel farklılıkların tubal ligasyona yönelik tutumları ve kabulleri üzerinde önemli etkileri olabileceğini vurgulamaktadır.

Anahtar Kelimeler: Tubal ligasyon, kadın sterilizasyonu, aile planlaması.

Abstract
Objectives: Although tubal ligation (TL) is a safe and effective method of permanent contraception, women may reject it for medical, social, economic, cultural reasons. The study was conducted to determine knowledge about and attitudes toward TL among Turkish and Syrian women.

Materials and Methods: A cross-sectional, descriptive study was conducted with 420 women in the women’s health unit of a hospital affiliated with the Ministry of Health in southeastern Turkey. In the research, "Diagnostic Form" was used as the data collection tool.

Results: The investigation of the women’s perspectives of TL demonstrated that 32.10% of the Turkish women and 46.80% of the Syrian women considered it as a sin, 22.80% of the Turkish women and 37.60% of the Syrian women thought they might lose their authority in the family life, 22.80% of the Turkish women and 43.90% of the Syrian women thought that the intervention might have a negative impact on their sexual life, 20.90% of the Turkish women and 36.10% of the Syrian women thought that TL should be banned, 60.40% of the Turkish women, 45.90% of the Syrian women believed that TL was a reliable method and 34.40% of the Turkish women and 48.30% of the Syrian women thought that having a lot of children gained them strength and status in the society (p<0.05).

Conclusion: Overall knowledge of women about TL was insufficient, and Syrian participants displayed more negative attitudes towards TL than Turkish participants. Our findings underscore the fact that cultural differences may have important effects on attitudes toward and acceptance of TL.

Keywords: Tubal ligation, female sterilization, family planning.
Introduction

Migration, a concept as old as human history, has social, cultural, and physical effects on society and individuals and also affects health, including reproductive health and family planning. Migration is an important phenomenon in a woman’s life since she has to adapt her needs (physical, psychological, economic and sexual) in the new place she has migrated to, her integration into the new society, the way she is welcomed by the new society, what migration has gained her and what she has left behind in the country she formerly lived.\(^1\) Migration is believed to affect refugees' knowledge and use of contraception and demands for contraceptive services.\(^2\) Factors related to the organization of refugee camps and access to health services in the host country may affect the contraceptive practices of refugees.\(^3\) Migration can potentially affect women’s bio-psycho-social health, contraceptive practices, and the health of their children. Especially for women who have to migrate without choice, contraceptive practices are more complex and can be affected by many factors such as inconvenient accommodations, living in multi-person dwellings, insufficient income, lack of health insurance, and language barriers.\(^4\) As a result of the civil war in Syria, millions of Syrians have had to migrate to neighboring countries since 2011 (Lebanon, Turkey, Jordan, etc.). Of these neighboring countries, Turkey has been most affected by the Syrian civil war. With the first migration wave in April 2011, 252 people moved to Turkey. From that date to October 2018, the number of refugees migrating into Turkey reached nearly 3.5 million.\(^5\) According to the data released by the Disaster and Emergency Management Presidency of Turkey (DEMPT).\(^6\) 52% of Syrians who immigrated to Turkey were women, and 24% of them were of reproductive age. Syrian refugees are a vulnerable population because they lost their homes and have limited access to basic human rights such as food and health care. Further, women refugees are more vulnerable because of their sex. Women face extra challenges such as insufficient access to reproductive health services, unintended pregnancies, unsafe childbirth, gender-based violence, and lack of information.\(^7\) The need for reproductive health services of refugee women cannot always be met because of financial and logistic reasons. In particular, in the literature, it is stated that women’s access to health insurance is an important factor affecting their decisions to choose female sterilization.\(^2\)

Gaziantep, one of the leading cities in Turkey in terms of its industrial and trading capacity, is among the ten cities that have received the most of immigrants from Syria. Therefore, it has an important role in determining the general characteristics of Syrian refugees. It also has crucial importance for determining the qualification of these people and their integration into Turkish society. It has also gained strategic importance since it is adjacent to the Syrian border and thus hosts refugees fleeing from the political crisis in Syria and seeking shelter in the tent city established there.\(^8\) Therefore, Gaziantep is of great importance for researchers aiming to investigate fertility control-related attitudes and behaviors of Turkish and Syrian women, and to compare cultural differences between them in terms of fertility control.
From 2011, when the civil unrest began in Syria, to the first quarter of 2014, Syrian women gave birth to 11,249 children in Turkey, 82.4% of them were in refugee camps, and 17.6% outside of refugee camps. According to the United Nations report (United Nations, Department of Economic and Social Affairs, Population Division, the total fertility rate (live births per woman) was 2.12 and 3.10 in Turkey and Syria respectively between 2010 and 2015. This report also documented that the prevalence of using any family planning method was 74.2% in Turkey and 57.7% in Syria. The types and rates of the methods were as follows: female sterilization (9.5% in Turkey and 2.9% in Syria), contraceptive pills (4.6% in Turkey and 9.8% in Syria), intrauterine devices (16.9% in Turkey and 25.0% in Syria), and male condom (15.9% in Turkey and 2.3% in Syria). Contraception methods, especially female sterilization, which is a modern, reliable contraception method, are even more important for Syrian and Turkish women since they have high fertility rates. All individuals, including refugee women, should be able to access contraception services as part of primary health care services. Contraception services have a positive impact on their having healthy pregnancies and births. Moreover, the use of contraception methods can be improved by education to dispel negative attitudes towards various contraception methods. In order to clarify the next steps to address contraception services for Syrian women in Turkey, it is important to identify their attitudes toward contraception methods and thoughts regarding pregnancy and contraception methods. Few researchers have investigated the attitudes towards and need for contraception services among Syrian refugees’ living in Turkey.

Dikmen et al., found that Syrian refugee women admitted to hospitals in Turkey want to have more children despite the challenges posed by migration. The migration does not adversely affect their fertility, and they continue to have a greater number of births. Sunata stated that this is probably due to the fact that individuals with a refugee status believe that they can maintain their origin by increasing their fertility to compensate their loss of homeland as a result of being forced to abandon their country. This situation shows that the importance of reproductive health and contraception services for both Turkish women and Syrian women has increased. The state of the Republic of Turkey tries to provide Syrian refugees with reproductive health services. While Syrian refugees living in the refugee camps have access to standard health care services of Turkey’s government, the healthcare costs of the Syrian refugees not staying in the camps are covered by the DEMPT within the scope of the Healthcare Implementation Communique.

Despite improvements and advances in contraceptive methods, unintended pregnancies are still a global problem. The world’s population grows at 1.3% per year, or an annual net addition of 78 million people, reached 6 billion in 2000 and is estimated to reach 8 billion in 2025, 8.6 billion in 2030, 9.8 billion in 2050 and 11.2 billion in 2100. Today, women have access to many contraceptive options. However, the need for contraceptives in developing countries is not fully met, and the woman who does not use any contraceptive method is estimated to be 222 million. However, it is observed that the status of women in modern societies gradually changes with various socio-economic and demographic conditions. Although these advances have
been made in the status of women, permanent contraception may not be accepted due to sociological, cultural, and religious beliefs. This reveals the importance of sterilization for the prevention of unwanted pregnancies in countries with high fertility and for men and women who do not want more children. Tubal ligation is the surgical process through ligature and partial removal of permanently closing the fallopian tubes in women. Sterilization has become the most popular contraceptive method, and the aim in more than two-thirds of sterilization procedures performed worldwide has been contraception (one-third is for hydrosalpinx, pelvic pain, etc.). In the United States, annual female sterilization cases increased dramatically in the 1970s, peaked with 702,000 cases in 1977, and stabilized in the 1980s and at the beginning of 1990s. Since 1990, although the rate of female sterilization varies from region to region, it is still widely used in Asia, Latin America, the Caribbean, and North America.

Despite the fact that sterilization is a safe, effective, and increasingly popular method of contraception, women may reject it for several medical, social, economic, religious, and/or cultural reasons. Fertility control and the type of contraceptive method preferred by people may differ because of different social and cultural backgrounds, beliefs, and behaviors of people. Cultural background is thought to have a major effect on an individual’s attitudes, behaviors, and perspectives about contraception. Therefore, it is important to understand the factors that motivate Turkish and Syrian women, who are from two different cultures and among whom fertility rates are high, to undergo tubal ligation. For the effective counseling of tubal ligation, it should be evaluated considering the factors affecting the use of this method, such as the cultural differences. Fertility is a complex phenomenon that is greatly influenced by cultural conditions, preferences, and family structures. Moreover, fertility is affected by the socio-economic situation and various demographic components. Thus, various socio-economic and demographic factors have a major impact on promoting family planning methods and ultimately reducing fertility. In particular, Turkey and understanding of cultural factors affecting fertility, contraceptive use is high in society, such as Syria, applied to produce programs that will increase the prevalence of contraceptive use is of great importance to all efforts. This study is thought to be important that recognizing the attitudes toward TL of the community living in Gaziantep, where the fertility rate and the rate of migration of Syrian women are high. Also, it is important to determine the region’s lack of information about TL, to investigate the problems and priorities about TL, to determine the most commonly used contraceptive methods, and to organize contraception services to be provided in the region. Therefore, the purpose of this study was to contribute to the literature because it demonstrates how women of two different cultures perceive sterilization and the effect of their perception of contraception. This descriptive study was conducted to determine Turkish and Syrian women’s knowledge of and attitudes towards tubal ligation.
Materials and Methods

Study Design

This descriptive and cross-sectional study was conducted with Turkish and Syrian women who gave birth between October 2017 and February 2018 in the postpartum service of Cengiz Gökçek Maternity and Children Hospital affiliated with the Ministry of Health. Before the study, written permission from the administration of the hospital where the study was to be conducted and ethical approval from Gaziantep University Ethical Review Board (Date: 09.10.2017, No: 48) were obtained.

Participants

The sample size was calculated using the sample size determination formula for a known population (The formula: \( n = \frac{NZ^2P(1-P)}{d^2(N-1)+Z^2P(1-P)} \), \( n \) = Sample size with finite population correction, \( N \) = Population size, \( Z \) = Statistic for a level of confidence, \( P \) = Expected proportion, \( d \) = Precision (in a proportion of one)).^{23} The inclusion criterion was being married, having at least one child, being literate, being able to speak Turkish, and volunteering to participate in the study. Of the 600 questionnaires administered to potential participants, 180 were returned incomplete because 45 women were illiterate, 30 did not want to participate in the study, and 105 could neither speak nor read in Turkish. The response rate was 70.0%.

Procedures

Following a review of the relevant literature, the 31-item information form was created.^{13-16} We invited women to participate in the study between October 2017 and February 2018. The study team invited women to participate, were informed about the purpose of the study and told that participation was voluntary and that they could withdraw at any time. The study team obtained verbal and written consent from all women. Then, they were asked to fill in the paper and pencil questionnaires by themselves, which takes approximately 15-20 min. After the study team collected the questionnaires, the data were transferred to computer files for analysis by the study team.

Measures

An information form that included 31 items about the participants’ socio-demographic characteristics such as age, education status, employment status, duration of the marriage, income status, place of residence, having a daughter, having a son, the total number of children, contraception method used, by whom the decision to implement contraception, having information about contraception methods, willingness to undergo tubal ligation, having husbands who want them to undergo tubal ligation, when to undergo tubal ligation, being
influenced by the people in the environment about tubal ligation and receiving information on tubal ligation was used.

Statistical Analysis

The data were coded and entered into a database. Researchers used printed frequencies to check for outliers and to clean up the data. Then the data were exported to a software program, Statistical Package for the Social Sciences (SPSS), version 22.0, for analysis. The data were analyzed to calculate the frequency distribution of dependent and independent variables. Researchers employed the chi-square test to assess associations between the two dependent variables and the independent variables. The authors compared responses about the factors affecting the decision to use tubal ligation, identifying the resulting p-value of 0.05 as the significant level at 95% confidence interval.

Results

The participants' mean age was 31.08 ± 7.65 (min: 18, max: 45) years. Turkish women had fewer daughters and the total number of children than Syrian women. Turkish and Syrian women were similar in terms of education status, employment status, income status, and having a son (Table 1). In addition, 69.30% of the Turkish women and 74.60% of the Syrian women did not want to undergo tubal ligation, and 74.9% of the Turkish women’s husbands and 82.00% of the Syrian women’s husbands did not want their wives to undergo tubal ligation (Table 2).

It was found that 32.10% of the Turkish participants and 46.80% of the Syrian participants considered TL as a sin, and 22.80% of the Turkish women and 37.60% of the Syrian women though they might lose their authority in the family. Syrian women displayed more negative attitudes towards TL in the statements that expressed; “TL is a sin” (p=0.008), “The physician has the right to make a decision of TL” (p=0.007), “TL causes women to lose their authority in the family life” (p=0.001), “TL negatively affects sexual life” (p=0.001), “TL affects marriage negatively” (p=0.001), “TL should be banned” (p=0.002), “TL is a reliable method” (p=0.005) and “TL should be performed free of charge” (p=0.001) than Turkish women. There are statistically significant differences between Turkish and Syrian women in terms of variables about TL (Table 3).

Of the participating women who did not want to undergo tubal ligation, 45.70% were in the 18-28 age group, 50.30% were primary school graduates, 88.40% were unemployed, 39.40% had married for five or fewer years and 97.70% had husbands who did not want them to undergo tubal ligation. It was found that younger, less educated, or married for five or fewer years, or had husbands women displayed more negative attitudes towards TL. It was found that there are statistically significant differences between Turkish and Syrian women
who did not want to undergo TL in terms of the following variables: age groups (p=0.001), length of marriage (p=0.001), the region of residence (p=0.021), who should decide family planning (p=0.001) and the number of children (p=0.001) (Table 4).

**Table 1.** Distribution of Socio-Demographic-Obstetric Characteristics of Turkish and Syrian Women (n=420)

| VARIABLES                  | Turkish women (n=215) | Syrian women (n=205) | Total | X²   | P     |
|----------------------------|-----------------------|----------------------|-------|------|-------|
| Age groups (years)         |                        |                      |       |      |       |
| 18-28                      | 102 47.40             | 73 35.60             | 175   | 41.70| 16.560| 0.001*|
| 29-39                      | 88 40.90              | 77 37.60             | 165   | 39.30| 0.001*|
| ≥40                        | 25 11.70              | 55 26.80             | 80    | 19.00|       |
| Education Status           |                        |                      |       |      |       |
| Primary school             | 108 50.20             | 99 48.30             | 207   | 49.30| 2.262 | 0.520 |
| Middle school              | 53 24.70              | 60 29.30             | 113   | 26.90|       |
| High school                | 37 17.20              | 27 13.20             | 64    | 15.20|       |
| University /College        | 17 7.90               | 19 9.20              | 36    | 8.60 |       |
| Employment status          |                        |                      |       |      |       |
| Employed                   | 25 11.60              | 25 12.20             | 50    | 11.90| 0.032 | 0.858 |
| Not employed               | 180 88.40             | 180 87.80            | 370   | 88.10|       |
| Duration of marriage (years) |                  |                      |       |      |       |
| 1-5                        | 88 40.90              | 65 31.70             | 153   | 36.40| 18.557| 0.001*|
| 6-11                       | 54 25.20              | 47 22.90             | 101   | 24.00|       |
| 12-17                      | 42 19.50              | 28 13.70             | 70    | 16.70|       |
| ≥18                        | 31 14.40              | 65 31.70             | 96    | 22.90|       |
| Income status              |                        |                      |       |      |       |
| Sufficient                 | 24 11.20              | 23 11.20             | 47    | 11.20| 2.367 | 0.306 |
| Partially sufficient       | 126 58.60             | 106 51.70            | 232   | 55.20|       |
| Not sufficient             | 65 30.20              | 76 37.10             | 141   | 33.60|       |
| Place of residence         |                        |                      |       |      |       |
| City                       | 132 61.40             | 95 46.30             | 227   | 54.00| 9.906 | 0.007*|
| Town                       | 48 22.30              | 59 28.80             | 107   | 25.50|       |
| Village                    | 35 16.30              | 51 24.90             | 86    | 20.50|       |
| Having a daughter          |                        |                      |       |      |       |
| Yes                        | 176 81.90             | 183 89.30            | 359   | 85.50| 4.639 | 0.031*|
| No                         | 39 18.10              | 22 10.70             | 61    | 14.50|       |
| Having a son               |                        |                      |       |      |       |
| Yes                        | 159 74.00             | 164 80.00            | 323   | 76.90| 2.160 | 0.142 |
| No                         | 55 26.00              | 41 20.00             | 97    | 23.10|       |
| Total number of children   |                        |                      |       |      |       |
| 1                          | 58 27.00              | 39 19.00             | 97    | 23.10|       |
| 2                          | 56 26.00              | 41 20.00             | 97    | 23.10|       |
| 3                          | 48 22.30              | 40 19.50             | 88    | 21.00|       |
| ≥4                         | 53 24.70              | 85 41.50             | 138   | 32.90|       |

*p<0.05
Table 2. Distribution of Information Related to Some Variables of Turkish and Syrian Women (n=420)

| VARIABLES | Turkish (n=215) | Syrian (n=205) | Total | X² | p  |
|-----------|----------------|----------------|-------|----|----|
|           | n   | %   | n   | %   | n   | %   |       | 0.05 |
| Family planning method used |       |       |       |       |       |       |       | 0.05 |
| IUD       | 36  | 16.80 | 32  | 15.60 | 68  | 16.10 | 12.180 | 0.095 |
| Condom    | 38  | 17.70 | 30  | 14.60 | 68  | 16.20 |       |      |
| Pill      | 37  | 17.20 | 58  | 28.30 | 95  | 22.60 |       |      |
| Withdrawal| 33  | 15.40 | 26  | 12.70 | 59  | 14.10 |       |      |
| Not use   | 71  | 16.90 | 59  | 28.80 | 130 | 31.00 |       |      |
| By whom the decision to implement a contraception method should be made |       |       |       |       |       |       |       | 0.05 |
| Women only| 55  | 25.60 | 51  | 24.90 | 106 | 25.20 | 11.916 | 0.003* |
| Men only  | 19  | 8.80  | 42  | 20.50 | 61  | 14.50 |       |      |
| Together  | 141 | 65.60 | 112 | 54.60 | 253 | 60.20 |       |      |
| Having information about contraception methods |       |       |       |       |       |       |       | 0.05 |
| Yes       | 157 | 73.00 | 117 | 57.10 | 274 | 65.20 | 11.772 | 0.001* |
| No        | 58  | 27.00 | 88  | 42.90 | 143 | 34.80 |       |      |
| Willingness to undergo tubal ligation |       |       |       |       |       |       |       | 0.05 |
| Yes       | 66  | 30.70 | 52  | 25.40 | 118 | 28.10 | 1.477  | 0.224 |
| No        | 149 | 69.30 | 153 | 74.60 | 302 | 71.90 |       |      |
| Having husbands who want them to undergo tubal ligation |       |       |       |       |       |       |       | 0.05 |
| Yes       | 54  | 25.10 | 37  | 18.00 | 91  | 21.70 | 3.088  | 0.079 |
| No        | 161 | 74.90 | 168 | 82.00 | 329 | 78.30 |       |      |
| When to undergo tubal ligation * |       |       |       |       |       |       |       | 0.05 |
| Never     | 59  | 27.40 | 94  | 22.40 | 153 | 36.40 |       |      |
| If there are enough number of children | 102 | 47.40 | 67  | 32.70 | 169 | 40.20 |       |      |
| If there is a maternal risk | 57  | 26.50 | 38  | 18.50 | 95  | 22.60 |       |      |
| No economic power to care for children | 36  | 16.70 | 29  | 14.10 | 65  | 15.50 |       |      |
| If the husband wants | 7   | 3.30  | 11  | 5.40  | 18  | 4.30  |       |      |
| Being influenced by the people in the environment about tubal ligation |       |       |       |       |       |       |       | 0.05 |
| Yes       | 68  | 31.60 | 62  | 30.20 | 130 | 31.00 | 0.094  | 0.759 |
| No        | 147 | 68.40 | 143 | 69.80 | 290 | 69.00 |       |      |
| Receiving information on tubal ligation |       |       |       |       |       |       |       | 0.05 |
| Yes       | 92  | 42.80 | 93  | 45.40 | 185 | 44.00 | 0.282  | 0.595 |
| No        | 123 | 57.20 | 112 | 54.60 | 235 | 56.00 |       |      |

*p<0.05

Statistical evaluation was not been made because more than one option is selected.
| OPINIONS                              | Turkish (n=215) | Syrian (n=205) | Total          | X²   | P     |
|--------------------------------------|-----------------|----------------|----------------|------|-------|
|                                      | n   | %   | n   | %   | n   | %   |
| Tubal ligation is a sin              |     |     |     |     |     |     |
| Agree                                | 69  | 32.10 | 96  | 46.80 | 165 | 39.30 |
| Disagree                             | 101 | 47.00 | 77  | 37.60 | 178 | 42.40 |
| No opinion                           | 45  | 20.90 | 32  | 15.60 | 77  | 18.30 |
| Tubal ligation is a difficult procedure |     |     |     |     |     |     |
| Agree                                | 123 | 57.20 | 114 | 55.60 | 237 | 56.40 |
| Disagree                             | 51  | 23.70 | 58  | 28.30 | 109 | 26.00 |
| No opinion                           | 41  | 19.10 | 33  | 16.10 | 74  | 17.60 |
| The doctor has the right to decide on taking tubal ligation |     |     |     |     |     |     |
| Agree                                | 107 | 49.80 | 73  | 35.60 | 180 | 42.90 |
| Disagree                             | 87  | 40.50 | 114 | 55.60 | 201 | 47.90 |
| No opinion                           | 21  | 9.70  | 18  | 8.80  | 39  | 9.20  |
| Women lose their authority in the family life |     |     |     |     |     |     |
| Agree                                | 49  | 22.80 | 77  | 37.60 | 126 | 30.00 |
| Disagree                             | 118 | 54.90 | 89  | 43.40 | 207 | 51.70 |
| No opinion                           | 38  | 17.70 | 39  | 19.00 | 77  | 18.30 |
| Tubal ligation completely prevents future pregnancies |     |     |     |     |     |     |
| Agree                                | 166 | 77.20 | 161 | 78.50 | 327 | 77.90 |
| Disagree                             | 35  | 16.30 | 29  | 14.10 | 64  | 15.20 |
| No opinion                           | 14  | 6.50  | 15  | 7.40  | 29  | 6.90  |
| Tubal ligation adversely affects sexual life |     |     |     |     |     |     |
| Agree                                | 49  | 22.80 | 90  | 43.90 | 139 | 33.10 |
| Disagree                             | 118 | 54.90 | 83  | 40.50 | 201 | 47.90 |
| No opinion                           | 48  | 22.30 | 32  | 15.60 | 80  | 19.00 |
| Tubal ligation adversely affects marital relations |     |     |     |     |     |     |
| Agree                                | 47  | 21.90 | 88  | 42.90 | 135 | 32.10 |
| Disagree                             | 118 | 54.90 | 86  | 42.00 | 204 | 48.60 |
| No opinion                           | 50  | 23.20 | 31  | 15.10 | 81  | 19.30 |
| Tubal ligation adversely affects women’s psychology |     |     |     |     |     |     |
| Agree                                | 76  | 35.30 | 92  | 44.90 | 168 | 40.00 |
| Disagree                             | 118 | 54.90 | 88  | 33.20 | 156 | 37.10 |
| No opinion                           | 51  | 23.20 | 45  | 22.00 | 96  | 22.90 |
| Tubal ligation should not be used as a contraception method by women |     |     |     |     |     |     |
| Agree                                | 77  | 35.80 | 82  | 40.00 | 159 | 37.90 |
| Disagree                             | 94  | 43.70 | 91  | 44.40 | 185 | 44.00 |
| No opinion                           | 44  | 20.50 | 32  | 15.60 | 76  | 18.10 |
| Tubal ligation should be banned      |     |     |     |     |     |     |
| Agree                                | 45  | 20.90 | 74  | 36.10 | 119 | 28.30 |
| Disagree                             | 128 | 59.50 | 96  | 46.80 | 224 | 53.30 |
| No opinion                           | 42  | 19.60 | 35  | 17.10 | 77  | 18.40 |
| It is every woman’s right to want her tubes to be closed |     |     |     |     |     |     |
| Agree                                | 147 | 68.40 | 103 | 50.20 | 250 | 59.50 |
| Disagree                             | 42  | 19.50 | 67  | 32.70 | 109 | 26.00 |
| No opinion                           | 26  | 12.10 | 35  | 17.10 | 61  | 14.50 |
| Tubal ligation is a reliable method  |     |     |     |     |     |     |
| Agree                                | 129 | 60.00 | 94  | 45.90 | 223 | 53.10 |
| Disagree                             | 37  | 17.20 | 60  | 29.30 | 97  | 23.10 |
| No opinion                           | 49  | 22.80 | 51  | 24.90 | 100 | 23.80 |
| Tubal ligation should be free of charge |     |     |     |     |     |     |
| Agree                                | 147 | 68.40 | 94  | 45.90 | 241 | 57.40 |
| Disagree                             | 34  | 15.80 | 71  | 34.60 | 105 | 25.00 |
| No opinion                           | 34  | 15.80 | 40  | 19.50 | 74  | 17.60 |
| Having many children gives a man a status in society |     |     |     |     |     |     |
| Agree                                | 74  | 34.40 | 99  | 48.30 | 173 | 41.20 |
| Disagree                             | 103 | 47.90 | 82  | 40.00 | 185 | 44.00 |
| No opinion                           | 38  | 17.70 | 24  | 11.70 | 62  | 14.80 |

p<0.05

Table 3. Distribution of Opinions of Turkish and Syrian Women Related to Tubal Ligation Propositions (n=420)
### Table 4. Analysis of the Socio-Demographic-Obstetric Characteristics of Turkish and Syrian Female Participants who did not Want to Undergo Tubal Ligation (n=302)

| VARIABLES                                      | Turkish (n=149) | Syrian (n=153) | Total | X²   | p    |
|------------------------------------------------|----------------|----------------|-------|------|------|
| **Age groups (years)**                         |                |                |       |      |      |
| 18-28                                          | 81 54.40       | 57 37.30       | 138   | 18.680 | 0.001* |
| 29-39                                          | 52 34.90       | 50 32.70       | 102   | 33.80 |      |
| ≥40                                            | 16 10.70       | 46 30.10       | 62    | 20.50 |      |
| **Education Status**                           |                |                |       |      |      |
| Primary school                                 | 75 50.30       | 77 50.30       | 152   | 50.30 | 1.059 0.787 |
| Middle school                                   | 40 26.80       | 46 30.10       | 86    | 28.50 |      |
| High school                                     | 20 13.40       | 20 13.10       | 40    | 13.20 |      |
| University/College                              | 14 9.50        | 10 6.50        | 24    | 7.90  |      |
| **Employment status**                          |                |                |       |      |      |
| Employed                                       | 19 12.80       | 16 10.50       | 35    | 11.60 | 0.388 0.533 |
| Not employed                                    | 130 87.20      | 137 89.50      | 267   | 88.40 |      |
| **Duration of marriage (years)**               |                |                |       |      |      |
| 1-5                                            | 67 45.00       | 52 34.00       | 119   | 39.40 | 17.032 0.001* |
| 6-11                                           | 37 24.80       | 46 30.10       | 86    | 28.50 |      |
| 12-17                                          | 26 17.40       | 21 13.70       | 47    | 15.60 |      |
| ≥18                                            | 19 12.80       | 50 32.70       | 69    | 22.80 |      |
| **Income status**                              |                |                |       |      |      |
| Sufficient                                     | 17 11.40       | 12 7.80        | 29    | 9.60  | 2.247 0.325 |
| Partially sufficient                            | 86 57.70       | 83 54.20       | 169   | 56.00 |      |
| Not sufficient                                  | 46 30.90       | 58 37.90       | 104   | 34.40 |      |
| **Place of residence**                         |                |                |       |      |      |
| City                                           | 90 60.40       | 68 44.40       | 158   | 52.30 | 7.729 0.021* |
| Town                                           | 32 21.50       | 45 29.40       | 77    | 25.50 |      |
| Village                                        | 27 18.10       | 40 26.10       | 67    | 22.20 |      |
| **By whom the decision to implement a contraception method should be made** | | | | | |
| Women only                                      | 44 29.50       | 37 24.20       | 81    | 26.80 | 15.390 0.001* |
| Men only                                       | 12 8.10        | 38 24.80       | 50    | 16.60 |      |
| Together                                       | 93 62.40       | 78 51.00       | 171   | 56.60 |      |
| **Having husbands who want them to undergo tubal ligation** | | | | | |
| Yes                                            | 5 3.40         | 2 1.30         | 7     | 2.30  | 1.399 0.237 |
| No                                             | 144 96.60      | 151 98.70      | 295   | 97.70 |      |
| **Total number of children**                   |                |                |       |      |      |
| 1                                              | 45 30.20       | 33 21.60       | 78    | 25.80 | 18.680 0.001* |
| 2                                              | 43 28.90       | 29 19.00       | 72    | 23.80 |      |
| 3                                              | 34 22.80       | 29 19.00       | 63    | 20.90 |      |
| ≥4 and above                                    | 27 18.10       | 62 40.40       | 89    | 29.50 |      |

*p<0.05
Discussion

It was investigated the knowledge about and attitudes toward TL among Turkish and Syrian women. Women’s status of fertility varies from region to region due to social, economic, religious, and cultural reasons. In this study, some differences were found between Turkish and Syrian women with two different cultures. In the present study, it was found that Turkish women had fewer daughters and a total number of children than Syrian women. The culture of Syria is centered around Mesopotamian culture, Islamic religion, and traditional Arab culture. Fertility is considered to be surplus-value in the country, and therefore, the fertility rates are high.24 Similarly, in a study conducted on Syrian migrant women, it has been found that 42.70% of women have five or more children.3 In addition, the desire to have a son, which is an important effect of traditional societies, it causes women to have frequent pregnancies and continue to give birth until the son is born. Because the son is considered to be the descendant of the family, the son has a separate status from the girl child.25

In the present study, it was found that the value of women in Syria is shaped by the number of births in their society and primarily the decision of contraception is determined by the husband and the family of the husband.26 Similar to the literature, in the present study, it was found that Syrian women, the response rate of the decision to implement a contraception method should belong only to men is much higher than Turkish women.

In the present study, it was determined that more than half of the participants who did not want to undergo tubal ligation was not knowledgeable about tubal ligation, which accounts for why the majority of the Turkish and Syrian women who participated in the present study did not want to undergo tubal ligation. In a study conducted in Ethiopia, it was determined that women with high knowledge of the long-term and permanent contraception methods are more likely to apply a long-lasting method than less informed women.27 In the literature, studies on tubal ligation have indicated that the leading factors affecting women’s decision to have surgical sterilization or their willingness to have it are age and the place of residence.28-29

In this study, it was found that older Turkish and Syrian women who did not want to undergo tubal ligation had more negative attitudes towards TL. Likewise, in other studies, the likelihood of preferring tubal ligation in individuals under 35 years of age has been reported to be lower 3-32 which suggests that their desire to end fertility is increasing as they age because they do not want to assume the responsibility for the care of a new child, and because they fear high-risk pregnancies.33 Women who work and women with high levels of education are more likely to prefer tubal ligation because they have more social relationships and they are more likely to access healthcare workers.34 Similar to the literature, in the present study, it was found that the women who have low levels of education or who are unemployed want to undergo tubal ligation less. It is also expressed that the number of children is considered as an important factor affecting their acceptance to
undergo tubal ligation. Similarly, in the present study, it was found that while the percentage of women who did not want to undergo tubal ligation was higher among the Turkish participants having one child, this is higher among the Syrian participants with four or more children. This can be attributed to the fact that in countries such as Iran or Syria, as the number of children increases women’s feelings of satisfaction, worthiness and excellence are also increases. In both urban and rural areas, children contribute to the family income by performing various jobs such as farming, construction, repair, and unskilled jobs, and especially sons are regarded as a source of economic security for older parents. In Turkey, especially in the eastern provinces, although not as much as in the past, the same perspective is dominant. This similarity can be attributed to the fact that the geographical location of the region where the study has been conducted was close to this region, and it is among the cities where Syrians immigrate most. The vast majority of citizens of the Republic of Turkey are Muslim. In Muslim countries, one of the most important factors affecting the practice of tubal sterilization is the religious belief, which suggests that fertility is controlled by fate and that curettage and sterilization are not allowed unless medical conditions necessitate them. In the present study, one-third of the Turkish participants and about half of the Syrian participants were found to perceive tubal ligation as a sin. Kisa et al. reported that more than half of the Muslim women in their study consider tubal ligation, and vasectomy methods as a sin, in their study. In a study conducted in Egypt by Waheeb et al., it was found that most of the participants believe that tubal sterilization would damage the perfect structure created by God. In a different study conducted in Germany, it is stated that 67% of the German women state that religion has no influence on their decision to choose a contraceptive method, which is supported by only 36.5% of Turkish women.

In addition to the religious view, another important factor affecting women’s knowledge of and attitudes towards the choice of contraception method is their spouses. In the present study, almost all of the husbands of the participants who did not want to undergo tubal ligation did not want them to undergo tubal ligation. In a study conducted in the United States, women who reported a conflict between them and their partners regarding surgical sterilization are more likely to regret undergoing surgical sterilization. Apart from this, it is reported that women can suffer sexual dysfunction because they think that they lose their reproductive ability after tubal sterilization. In the present study, one-quarter of the Turkish women and about half of the Syrian women thought that tubal ligation would negatively affect their sexual life and marital life. In many countries where fertility rates are high and in Western countries, women reported that the intervention yielded positive results on their sexual functioning since they had no fear of becoming pregnant after sterilization. In a study conducted in India, women who underwent tubal ligation reported that there is a positive increase in their sexual function and that they feel free and strong because there is no possibility of unintended pregnancies. On the other hand, in their qualitative study, Kılıç et al. (2009) stated that tubal ligation have no effect on women’s sexual life. Bolourian and Ganjloo stated that in Iran, an operation performed on female sexual organs like tubal ligation might lead to a significant decrease in their sexual desire and satisfaction, and increase the probability of dyspareunia. Cultural patterns, biological, physiological and psychological factors
are related to the level of sexual satisfaction. The differences between results of the mentioned studies show that the relationship between tubal ligation and sexual function is a complex process affected by many factors such as misinterpretation of different cultural conditions, ethnicity, and religious codes. If health personnel are to provide an effective family planning service, they must determine their clients’ attitudes towards planning, if their knowledge is not sufficient or is incorrect, they must provide them with sufficient and correct information, and if people's attitudes are clarified, efforts can be made to achieve the desired changes.

In the present study, it was found that Turkish women stated that they received more information about tubal ligation from Syrian women. Similar to our study, in a study conducted on refugees, it was found that almost all immigrant women have low rates of long-term contraception and lack of knowledge of tubal ligation. It is thought that they cannot get information about contraception methods because of the high number of refugee women, inconvenient accommodations, insufficient income, lack of health insurance, and language barriers.

**Limitations**

There are some limitations to the study. The research is a cross-sectional study. Therefore, it contains the limitations of cross-sectional research: This research is not free from recall biases. There is potential response bias. The participants may have intentionally given misleading answers to questions about sexuality. There is also a selection bias as the study included only the volunteers. It is only effective when it represents the entire population. The sample included 420 women of only two cultures who presented to only one hospital in Gaziantep: therefore, the results cannot be generalized. The inclusion criteria required participants to be literate and able to speak Turkish, which is another limitation of the study. The other limitation of the study is that in the literature, there are a limited number of studies on this subject; thus, we were unable to make a wide range of comparisons.

It was determined that the participants’ knowledge of tubal ligation was insufficient and that the Syrian women displayed more negative attitudes towards tubal ligation than the Turkish women. Despite the many advantages of permanent contraceptives, they can be less preferred due to obstacles such as lack of information, access to services, cost, and negative attitudes. However, this process can be improved by supporting women when they are to make their decisions to undergo tubal ligation. In the light of this finding, it is recommended that in further research, strategies to overcome cultural stereotypes and false beliefs should be identified, and actual concerns such as safety, efficiency, convenience and expense about permanent contraception should be investigated.
References

1. Erdoğan MM. Syrians in Turkey: Social Acceptance and Adaptation 'Hacettepe University Research Center for Migration and Politics - HUGO Publications, Ankara. 2015.

2. Ay M, González P, Delgado R. The perceived barriers of access to health care among a group of non-camp Syrian refugees in Jordan. International Journal of Health 2016;46(3):566-89.

3. Dikmen AH, Cankaya S, Yilmaz DS. The attitudes of refugee women in Turkey towards family planning. PHN 2019;36(1):45-52.

4. Kabakian-Khasholian T, Mourtada R, Bashour H, El Kak F, Zurayk H. Perspectives of displaced Syrian women and service providers on fertility behaviour and available services in West Bekaa, Lebanon. Reprod Health Matters 2017;25(1):75-86.

5. Gümüş G, Kaya A, Yılmaz SŞ, Özdemir S, Başbüyük M, Coşkun AM. Syrian refugee women’s reproductive health issues. NWH 2017;3(1):1-17.

6. UN Refugee Agency (UNHCR). Regional Refugee and Resilience Plan 2018-2019. In response to the Syria Crisis. 2018. Retrieved from https://data2.unhcr.org/en/situations/syria/location/113 (Access date: 11 January 2019).

7. The Disaster and Emergency Management Presidency of Turkey (DEMPT). Syrian women in Turkey 2014 Report. Retrieved from https://www.afad.gov.tr/upload/Node/17934/xfiles/turkiye_deki-suriyeli-kadinlar-2014_2_.pdf (Accessed date: 14 January 2019).

8. Hilary S. Syrian refugee women in Jordan: family planning preferences and barriers in a host community. Independent Study Project Collection. 24-45. 2016. Retrieved from https://digitalcollections.sit.edu/cgi/viewcontent.cgi?article=3473andcontext=isp_collection (Access date: 18 November 2018).

9. Sandal EK, Hançerkıran M, Tıraş M. Syrian refugees in Turkey and their reflections in Gaziantep Province. Gaziantep University Journal of Social Sciences 2016;15(2):461-83.

10. United Nations, Department of Economic and Social Affairs, Population Division (UNDESA). 2015. Trends in Contraceptive Use Worldwide 2015 (ST/ESA/SER.A/349). Retrieved from https://www.un.org/en/development/desa/population/publications/pdf/family/trendsContraceptiveUse2015Report.pdf (Access date: 18 November 2018).

11. Mutlu Y, Kirimsoy E, Antakyalioglu S. Suriyeli multeci cocuklar ve vatansizlik riski, bulanik mekanlarda gollende kalanlar, araştırma raporu (Syrian refugee children who remain in shadows and fuzzy location and statelessness risk, research report). Ankara: Sen Matbaa. 2016.

12. Sunata U. Refugees increase fertility. 2016. Retrieved from https://www.aljazeera.com.tr/al-jazeera-ozel/multecilik-dogurganligi-artirir-2 (Access date: 26 May 2019).
13. Gözükara F, Kabalcıoğlu F, Ersin F. Determining the attitudes of woman towards family planning in Şanlıurfa. Journal of Harran University Medical Faculty 2015;12(1):9-16.
14. Joshi R, Khadilkar S, Patel M. Global trends in use of long-acting reversible and permanent methods of contraception: Seeking a balance. Int J Gynaecol Obstet 2015;131(1):60-3.
15. United Nations, Department of Economic and Social Affairs, Population Division (UNDESA). World Population Prospects: The 2017 Revision. Retrieved https://esa.un.org/unpd/wpp/Publications/Files/WPP2017_KeyFindings.pdf (Accessed date: 18 November 2018).
16. Artunc B, Birge Ö. Ruptured ectopic pregnancy after bilateral tubal ligation. J Kartal TR 2015;26(2):177–8.
17. Chan LM, Westhoff CL. Tubal sterilization trends in the United States. Fertil Steril 2010;94(1):1-6.
18. Arora N, Choudhary S, Raghunandan C. Young women opting for tubal sterilisation in rural India: Reasons and implications. J Obstet Gynaecol 2010;30(2):175-8.
19. Erlenwein J, Kundu S, Schippert C, Soergel P, Hillemanns P, Staboulidou I. Attitude toward, acceptance of and knowledge about female sterilization as a method of contraception. Eur J Obstet Gynecol Reprod Biol 2015;185(2):83–7.
20. EngenderHealth. Contraceptive Sterilization: Global Issues and Trends. Factors Influencing Sterilization Use and Outcomes. Chapter 5. 2002:107.
21. Kısı S, Savaş E, Zeyneloğlu S, Dönmez S. Opinions and attitudes about vasectomy of married couples living in Turkey. Am J Mens Health 2017;11(3):531–41.
22. Ministry of National Education. Family planning, Nursing. Ankara. 2012:1-36
23. Karatas N. Sampling research. Erefe I, editor. Nursing Research Principles, Process and Methods. 3.Print. Ankara: Focus Offset. 2004.
24. Al Jazeera. Religious and ethnic map of Syria. 2016. Retrieved from http://www.aljazeera.com.tr/haber/suriyenin-dini-ve-etnik-haritasi (Accessed date: 18 May 2019).
25. Akça H, Ela M. Analysis of the relation between education, fertility and unemployment in Turkey. Journal of Finance 2012;163:223-42.
26. Karakaya E, Çağrı Ö, Ozerdoğan N, Yakıt E. Syrian refugee women's fertility characteristics and influencing factors: a qualitative study. J Int Soc Res 2017;10:417-27.
27. Temesgen, A. Assessment of the prevalence and factors influencing the utilization of long acting and permanent contraceptive method in Butajira town, Gurage zone, southern Ethiopia. Ethiopia: Addis Ababa. MPH thesis, Addis Ababa University.2007.
28. Humera H, Sajad KP, Bhat I, Gazala H, Rehana H. Knowledge, attitude and practice of contraception in Rural Kashmir. J Obstet Gynaecol India 2013;63(6):410–4.
29. Moniz MH, Chang T, Heisler M, Admon L, Gebremariam A, Dalton VK, Davis M M. Inpatient postpartum long-acting reversible contraception and sterilization in the United States, 2008–2013. Obstet Gynecol 2017;129(6):1078-85.

30. Bhutta SZ, Zaeem S, Korejo R. Female surgical sterilization at a tertiary care hospital in Karachi. J Ayub Med Coll Abbottabad 2004;16(2):42-5.

31. McMahon S, Hansen L, Mann J, Sevigny C, Wong T, Roache M. Contraception. BMC Womens Health 2004;4(1):25.

32. Öztas Ö, Baydar AA, Kayhan TB, Yalçıntaş A, Üstü Y, Uğurlu M. Knowledge, attitude and behaviour of married women of 18-49 age group about reproductive health and contraception. Ank Med J 2015;15(2):67-76.

33. Borrero S, Nikolajski C, Rodriguez K L, Creinin MD, Arnold RM, Ibrahim SA. Everything I Know I Learned from My Mother...or Not: Perspectives of African-American and white women on decisions about tubal sterilization. J Gen Intern Med 2009;24(3):312–9.

34. Anderson J, Jamieson DJ, Warner L, Kissina DM, Nangiac AK, Macalusod M. Contraceptive sterilization among married adults: national data on who chooses vasectomy and tubal sterilization. Contraception 2012;85(6):552–7.

35. Daniels K, Daugherty J, Jones J, Mosher W. Current contraceptive use and variation by selected characteristics among women aged 15–44: United States, 2011–2013 U.S. Department of Health and Human Services Centers for Disease Control and Prevention National Center for Health Statistics National Health Statistics Reports. 2015:1-15.

36. Sadatmahalleh J, Ziaei S, Kazemnejad A, Mohamadi E. Evaluation of sexual function and quality of life in Iranian women with tubal ligation: a historical cohort study. Int J Impot Res 2015;27:173–7.

37. Waheeb AZ, El Faky A. Community and service providers’ attitudes about tubal ligation for medical reasons, The British Journal 2005:12.

38. Dönmez S. Fertility control: sterilization. Academic Researches in Health Sciences. Ed: M.Kuş. ISBN:978-605-288-399-0. 1.print, Ankara, April, 2018:77-96.

39. Jamieson DJ, Kaufman SC, Costello C, Hillis SD, Marchbanks PA, Peterson HB. A Comparison of women’s regret after vasectomy versus tubal sterilization. Obstet Gynecol 2002;99(6):1073–9.

40. Kunkeri SP, Sathyarayana Rao TS, Andrade C. Study of sexual functioning and disorder in women before and after tubal sterilization (tubectomy). Indian J Psychiatry 2017;59(1):63-8.

41. Brault MA, Schensul SL, Singh R, Verma RK, Jadhav K. Multilevel perspectives on female sterilization in low-income communities in Mumbai, India. Qual Health Res 2016;26(11):1550–60.

42. Kılıç A, Akyüz A, Yavan T, Güvenç G. A qualitative study on the effects of contraceptives on sexual life. Turkiye Klinikleri J Gynecol Obst 2009;19(3):131-41.

43. Bolourian Z, Ganjloo J. Evaluation of sexual dysfunction and some related factor in women. J Reprod Infertil 2007;31(8):163–70.
44. Gonzalez M, Viafara G, Cab F, Molina T, Ortiz C. Libido and orgasm in middleaged woman. Maturitas 2006;53(1):1–10.

45. Salisbury P, Hall L, Kulkus S, Paw MK, Tun NW, Min AM. et al. Family planning knowledge, attitudes and practices in refugee and migrant pregnant and postpartum women on the Thailand-myanmar border—a mixed methods study. Reprod Health 2016;13(1):94.