

Original Article

The Relationship between University Students' Knowledge about Family Planning and their Attitudes towards Social Gender Roles

Gokce Demir, PhD

Associate Professor, Kirsehir Ahi Evran University, Faculty of Health Sciences, Department of Community Health Nursing, Kirsehir, Turkey

Makbule Tokur Kesgin, Dr

Assistant Professor, Health of School, Nursing Department, Abant Izzet Baysal University, Bolu Turkey

Deniz Tanyer, PhD

Associate Professor, Health Science Faculty, Public Health Nursing Department, Selcuk University, Konya, Turkey

Correspondence: Gokce Demir, Associate Professor PhD, Ahi Evran University Health School Nursing Department Kirsehir, Turkey e-mail: gokce_4068@hotmail.com

Abstract

Aim: This study aimed to define the relationship between university students' knowledge of family planning and their attitudes towards gender roles.

Methods: This descriptive and relational study was conducted with 727 Turkish university students. The data were collected using a questionnaire form, prepared by the researchers, and the Gender Roles Attitude Scale.

Results: Risk factors in assigning the main responsibility in family planning to one gender indicate that the students from rural areas believe 2.7 times more than those from urban areas that only one of the parents should make family planning decisions. Students with egalitarian attitudes toward gender roles are less likely to assign responsibility for family planning to a single gender.

Conclusion: The outcomes of this study contribute planning appropriate health programs for young people with the help of awareness on the knowledge of the health professions on family planning and their attitudes towards gender roles.

Keywords: University Student, Family Planning, Social Sex.

Introduction

Gender identity is individuals' feeling of being male or female in relation to their inner world. It is debated whether hormones, just like the environment, education, experience, genetic structure, nutrition, and brain development, can affect the feeling of being a woman or a man. For example, testosterone promotes success, aggression, and risky behaviors and estrogen strengthens communication and social ties (Herrman, 2014; Hines, 2010). Gender identity, social rules, values, and cultural and social indicators affect the development of gender roles (Herrman, 2014). These factors enable people to take up gender roles and shape their behaviors accordingly (Herrman, 2014; T. R. Ministry of Family and Social Policies, 2014). One of the

factors that has a significant impact on the development of gender roles is social media. Due to the transformation of traditional patriarchal gender roles in contemporary societies where social transformation is accelerated because of social media, gender roles have lost their legitimacy and have again become questionable. While social media reflects social values and transformations, it can also reinforce traditional patriarchal gender roles (Zeybekoglu Dunder, 2012). Gender roles, affect self-definition of identities, decision making and behavior (Herrman, 2014). Gender roles mirror the expectations of males and females in social situations ranging from obtaining primary education, the salaries they receive and becoming a member of parliament (The Millennium Development Goals Report, 2015). How

egalitarian are the demands of society from women and men throughout the world in general? Is there a group that is disadvantaged because of their gender role?

Gender equality is a human right, and it is necessary to ensure that individuals as women and men have equal access to the opportunities by which their development can be achieved. One of the pillars for the development of societies is gender equality (United Nations Development Programme Turkey, 2017). The World Health Organization describes gender equality as one of the structural determinants of health (United Nations Development Programme Turkey UNDP, 2017; Pender, Murdaugh, & Parsons, 2015). All enhancements of gender equality are significant steps toward enhancing public health (Pender et al., 2015). However, the answers to the questions above show that women are at a disadvantage in terms of gender equality, both in the world and in Turkey (World Economic Forum, 2016; T.R. Ministry of Family and Social Policy, 2014; Hacettepe University Institute of Health Sciences publication, 2013). For example, genital mutilation in African and Arab cultures, chastity control, adolescent marriages and adolescent pregnancies resulting from these marriages, complications related to pregnancy and childbirth, customs imposed by patriarchal societies, traditions, social repression, and violence and murder that women are subjected to in almost all periods of their lives are the most important indicators of the negative status of women (Akin & Demirel, 2003; Ozvaris, Dogan, & Akin, 1998).

In Western culture, women and men have equal rights, responsibilities, and opportunities in all fields of life. Moreover, women suffer minimal oppression that cannot be compared with the African and Arab cultures (European Commission, 2010; Sahin & Gultekin, 2013). For this reason, the third goal of the Millennium Development Goals is to ensure gender equality and empowerment of women (The Millennium Development Goals Report, 2015). In 2015, the United Nations, at the Sustainable Development Summit, which follows the Millennium Development Goals, established the goal of ensuring gender equality and the empowerment of women and girls by 2030 and created some indicators pertaining to it (Sustainable Development Knowledge Platform, 2017). The step-by-step implementation of these indicators by countries is crucial for ensuring gender

equality. It is certain that these indicators will act as guides to healthcare professionals, especially nurses in the public health sector, in planning services. For example, studies of ensuring gender equality in family planning services assist in forming healthier societies by enhancing the health of women, men and children. Thus, Healthy People 2020 prioritizes family planning (Healthy People, 2020).

Family planning helps people have children as many as they wish and determine pregnancy intervals. Contraceptive methods and infertility treatments are used for this purpose (World Health Organization WHO, 2016). Family planning services include contraceptives, reproductive health services, pregnancy testing, breast and pelvic examinations, breast and cervical cancer scans, the prevention of sexually transmitted diseases (STDs) and human immunodeficiency virus (HIV) and health training and guidance for families (Healthy People, 2020). The rate of global family planning needs that are not met is 12%. It is 22% in countries with lower incomes (World Health Organization WHO, 2016). Approximately 225 million women in developing countries use no contraceptive method, although they wish to postpone or avoid pregnancy. There are many reasons for this situation such as being young, unmarried or having low economic status (Kara Ulu, Demir, Tasar & Dallar, 2015) and obstacles related to gender roles (World Health Organization WHO, 2016).

One of the obstacles to social gender roles is related to sexuality. Social structures related to gender affect their approaches towards sexuality and family planning. Urban and rural cultures are different in Turkey. The conservative and traditional patriarchal culture in the rural areas is less flexible than that of urban areas, which is similar to Western cultures (Hacettepe University Publication of the Institute of Health Sciences, 2013). These characteristics significantly affect young people's attitudes about their gender roles. Females are more egalitarian, and men are more traditional patriarchal about gender roles (Ongen & Aytac, 2013).

Gender roles taught by society affect young people's views about topics such as family planning and sexuality. In Turkish culture, people avoid talking about sexual topics or contraceptives with young people, illicit sexual relationships are not welcomed, but men's illicit

sexual activities are tolerated (Duman et al., 2015). Many young males and females think illicit sexual activities are normal and acceptable, but they prefer for their spouses not to have had such experiences (Duman et al., 2015; Tokuc, Berberoglu, Saracoglu, & Celikkalp, 2011). Society tolerates illicit sexual activities of young males, and the fact that young males are not told about sexual health and family planning causes males to have more sexually transmitted diseases than females (Duman et al., 2015). However, male university students and those who have had sexual experiences know much more about the sexually transmitted diseases (Bakır & Kızılkaya Beji, 2015). However, in order to be accepted by society, women, especially in rural areas, are expected to permit someone else to determine how long they will pursue their education, when and who they will marry and when they will have a baby (Simsek & Kirmizitoprak, 2013). In addition, young women are accepted by society as long as they behave in accordance to its moral values (Tokuc et al., 2011). In a study conducted with the midwifery students in Turkey, students gave answers that comply with the expectations of the society to questions about sexual experience. Although society does not approve of women's illicit sexual activities, there are still a few women who engage in them for reasons such as love or curiosity (Evcili, Cesur, Altun, Guctas, & Sumer, 2013). The problems related the sexuality as perceived by society may worsen as long as sexuality is related to marriage and young people's sexual and reproductive health needs are disregarded. It is difficult for studies of family planning to be successful when sexuality is regarded as a taboo (Evcili et al., 2013; Kara Ulu et al., 2015). Before planning social studies for young people, determining their knowledge of family planning is important for a successful and helpful study. Young people's knowledge of family planning may affect their attitudes towards gender roles, and their attitudes towards gender roles may affect family planning practices. It is important for health professionals to identify such reasons that affect health and explain the relationships to improve and protect the health of the society. Thus, health professionals can more easily plan their health programs for the society. Therefore, this study was conducted to define the relationship between university students' knowledge of family planning and their attitudes towards gender roles.

Method

This is a descriptive and relational study to determine the relationship between the knowledge of family planning and the attitudes towards gender roles of the university students. This study search the answers for the questions listed below. What do the university students know about family planning?, What are the determiners of their attitudes towards gender roles?, What are the risk factors for assigning the responsibility for family planning to a single gender?

The Sample: The study population consisted of 1,150 first and final-year students studying in four different faculties (education, science and letters, economics and administrative studies, and agriculture) at a university in the Central Anatolia Region of Turkey during the 2014 spring semester. Tables for estimating a population proportion with specified absolute precision, issued by the World Health Organization (WHO), were used to determine the sample size. The sample size was found to be 683 with 5% significance level, 95% power rate and a family planning knowledge level of 80 (Duman et al., 2015; Lwanga & Lemeshow, 1991). Considering the potential for data loss, a sample size (727) higher than the suggested value was used. In the present study, a stratified sampling method was used to select samples, and since there were 4 different student groups coming from four different departments the population was divided into 4 strata. The stratification weight were determined considering the number of students in the departments: 36 of the sample were in the department of education, 276 were in the department of arts and sciences, 194 were in the department of economics and administrative studies, and 169 were in the department of agriculture. The last three digits of the students' identification numbers were taken into account while selecting students until completing the stratification number using simple random sampling table. These schools were used as variables in the study. The university where the study was conducted is located in central Turkey, and traditional patriarchal gender roles characterize this region. Moreover, the majority of the students came from rural areas. It was important to select a department other than the health sciences because determining knowledge levels about family planning was a primary goal of this study.

Data Collection Tools: The data were collected using a questionnaire prepared by the researchers and the Gender Roles Attitude Scale. The questionnaire includes questions about students' sociodemographic characteristics and knowledge of family planning. School, age, gender, residential area, number of siblings, family type, maternal and paternal educational levels, economic status and smoking were the sociodemographic characteristics. The most important sociodemographic variables that are thought to reflect the attitude of Turkish society towards gender roles are being male, residing in a rural area and maternal educational levels, so these are the main variables of this study. The questions about knowledge of family planning concerned the definition of family planning, contraceptive methods, considering abortion a contraceptive method, knowing emergency contraceptive methods and categorizing family planning methods. Before the data collection, the questionnaire was examined and the content was validated by experts from the professions of nursing, statistics, sociology and education and a preliminary application was performed with 20 2nd-year and 3rd-year students educating in the same university. It was observed that in the preliminary application, questions in the data collection tools were comprehensible and the acquired data were sufficient for collecting the data required in the study. The Gender Roles Attitude Scale, developed by Zeyneloglu and Terzioglu (2011), was used to evaluate students' attitudes towards gender roles. The instrument's total Cronbach alpha internal consistency coefficient was found to be 0.92 by Zeyneloglu and Terzioglu. The findings that were obtained showed that the survey is a valid and reliable instrument for determining university students' attitudes towards gender roles. Also a study by Aydın et al. (2016) calculated the instrument's total Cronbach alpha internal consistency coefficient as 0.914.

The Gender Roles Attitude Scale (GRAS): This scale is used to determine attitudes towards gender roles. It consists of 38 items and 5 subdimensions. Its subdimensions include egalitarian gender roles, female gender roles, gender roles in marriage, traditional patriarchal gender roles and male gender roles. This five-point Likert type scale were scored with students' opinions regarding the egalitarian attitude sentences related to gender roles as follows: 5 points for entirely agree, 4 point for agree, 3

points for not sure, 2 points for do not agree and 1 point for entirely disagree. The highest and lowest possible scores are 190 and 38. Highest scores indicate egalitarian attitudes towards gender roles, and low scores indicate traditional patriarchal attitudes towards gender roles. The subdimensions of egalitarian gender roles, female gender roles, gender roles in marriage and traditional patriarchal gender roles consists of eight items, and the male gender role subdimension consists of six items (Zeyneloglu & Terzioglu, 2011). The Cronbach's alpha coefficient was found to be 0.92 in the reliability study, and the coefficient ranged between 0.72 and 0.80 for the subdimensions. Construct validity was examined during the reliability study. A structure with five factors was tested, and factor loads ranged between 0.35 and 0.79. All factors explain 46% of the variance.

Procedure: The data collection tools were used in classes during the hours approved by the administrations of the departments between April 1 and 30. Students were informed about the study, the questionnaire and the ethical dimensions before they were handed the questionnaire form. Then the researchers delivered the data collection tools and informed consent forms to the students to sign. The students filled out the data collection tools and submitted them to the researcher. This took 25 minutes.

Data Analysis: The students' knowledge of family planning was examined using descriptive statistics. Multiple regression analysis was performed to identify the determinant factors for gender role attitudes. How sociodemographic characteristics affected these attitudes was evaluated in this phase. Logistic regression analysis was also performed to examine the assignment of family planning responsibilities to a single gender and to determine whether or not family planning was affected by gender. The data were transformed into dummy variables for the multiple regression analysis, and those with a risk factor were coded as 1 and those without a risk factor were coded as 0 for the logistic regression analysis. Details regarding the codes are displayed in the table.

Limitations of the Study: The study was limited to first and final-year students studying in four faculties of a university.

Ethical Approval: The required permission (2014/06-02) was obtained from University's

Ethical Committee for the Nonclinical Studies of Humans. Relevant permissions were obtained from the deanships of the faculties where the study was conducted, and informed consent was obtained from the students.

Results

The mean age of the participants was 21.1 ± 2.3 , and 62.3% of the participants were female. Of the students, 96.6% were single, and 61.3% lived a considerable part of their lives in urban areas. Of them, 89.5% had nuclear families, and the mothers of 65.2% and the fathers of 33.4% had a primary school education or less. The mean number of siblings was 2.4 ± 1.7 . Of the students, 36.0% studied in the department of education, 27.6% in the department of arts and sciences, 19.4% in the department of economics and administrative sciences, and 16.9% in the department of agriculture. Of them, 37.7% live in state dormitories, and 24.8% live with their friends. Of them, 64.9% state their income as moderate, 14.7% consume alcohol, and 19.4% smoke (Table 1).

Of the participants, 68.9% did not know the comprehensive definition of family planning, 87.1% said that both partners are responsible for family planning, and 51.0% did not know any family planning methods. The most popular family planning method (known by 13.6%) was oral contraceptives. Of the participants, 11.7% defined abortion as a family planning method, and 10.0% said that they know what an emergency contraceptive method is. When the students were asked to classify family planning methods as effective and partly effective, 48% categorized oral contraceptives, 61.2% categorized radioimmunoassay, 52.8% categorized condoms, 55.8% categorized tubal ligation, 50.3% categorized vasectomy, 51.4% categorized subcutaneous implants, and 50.6% categorized injectable contraceptives as effective

methods. Of them, 54.5% classified the withdrawal method as traditional, and 55.4% said this of the calendar method. Of the participants, 81.0% knew about STDs, and 62.3% knew only about AIDS (Table 2).

The students' mean score on the GRAS was 135.9 ± 21.8 . Scale determinants were evaluated using multiple regression analysis (enter method). School, place of residence, family type, paternal educational levels and smoking were not determinant for the gender role attitudes score ($p > 0.05$). Age, gender, number of siblings, maternal educational levels and economic status were significant determinants. Increase in age ($\beta = 0.104$) positively affected attitudes. However, male gender ($\beta = -0.508$), more siblings ($\beta = -0.095$), mothers' educational levels of primary school or lower ($\beta = -0.093$) and smoking ($\beta = -0.054$) negatively affected attitudes towards gender roles. These variables explain approximately 29% of gender role attitudes (Table 3).

Risk factors for assigning responsibility for family planning to a single gender indicate that students from rural areas believe 2.7 times more (OR: 2.719, CI: 1.093-6.767) than students from urban areas that only one of the parents should undertake the responsibility in making decisions related to family planning. In addition, students with extended families believe the same idea 2.2 times more (OR: 2.257 CI: 4.324) than those with nuclear families, and those with moderate or low economic status do so 1.7 times more (OR: 1.776 CI: 1.009-3.127) than those with high economic status. Higher mean scores on the GRAS were a positive factor (OR: 0.971 CI: 0.958-0.983), and this increased the likelihood that students believe that parents should make family planning decisions together. The other variables were not found to have significant effect ($p > 0.05$; Table 4).

Table 1. Distributions of the Students in Terms of Socio-Demographic Characteristics

Characteristics	Number	(%)	$\bar{x} \pm ss$
Age			21.1 ± 2.32
Number of siblings			2.4 ± 1.7
Gender			
Female	453	62.3	
Male	274	37.7	

Marital status

Married/living together	25	3.4
Single	702	96.6

Place of residence

Urban areas	446	61.3
Rural areas	281	38.7

Family type

Nuclear	651	89.5
Extended	76	10.5

Mother's educational level

Illiterate	55	7.6
Literate	51	7.0
Elementary school graduate	368	50.6
Middle school graduate	127	17.5
High school graduate	102	14.0
University/college graduate	24	3.3

Father's educational level

Illiterate	6	.8
Literate	30	4.1
Elementary school graduate	207	28.5
Middle school graduate	179	24.6
High school graduate	180	24.8
University/college graduate	125	17.2

Department

Department of education	262	36.0
Department of arts and sciences	201	27.6
Department of economics and administrative sciences	141	19.4
Department of agriculture	123	16.9

Residence

Dormitory	274	37.7
live with their friends	180	24.8
House	273	37.5

Economic condition

Low	144	19.8
Moderate	472	64.9
High	111	15.3

Alcohol use

Yes	107	14.7
No	620	85.3

Smoking

Yes	141	19.4
No	586	80.6

Table 2. Students' Knowledge of Family Planning

Variables	Number	%
Knowing the definition of family planning		
Yes	501	68.9
No	226	31.1
Who must have responsibility for family planning		
Couples	633	87.1
Only women	43	5.9
Only men	51	7.0
Knowing any birth control methods		
Yes	356	49.0
No	371	51.0
Considering abortion a birth control method		
Yes	85	11.7
No	642	88.3
Knowing an emergency birth control method		
Yes / He / She knows	73	10.0
He / She has only heard	150	20.6
No	504	69.3
Knowing Sexually Transmitted Diseases		
Yes	589	81.0
No	138	19.0

Classification of FP Methods	Traditional Number Percentage	Modern Number Percentage	No knowledge Number Percentage
Oral Contraceptives	223(30.7)	349(48.0)	155(21.3)
Radioimmunoassay	101(13.9)	445(61.2)	181(24.9)
Condom	162(22.3)	384(52.8)	181(24.9)
Tubal Ligation	71(9.8)	406(55.8)	250(34.4)
Vasectomy	73(10.0)	366(50.3)	288(39.6)
Subcutaneous implants	80(11.0)	374(51.4)	273(37.6)
Injectable contraceptives	85(11.7)	368(50.6)	274(37.7)
The diaphragm foam, gel	220(30.3)	234(32.2)	273(37.5)
Withdrawal	396(54.5)	97(13.3)	234(32.2)
Calendar method	403(55.4)	110(15.1)	214(29.4)
Female condom	204(28.1)	272(37.4)	251(34.5)

Table 3. The Determinants of Gender Roles Attitude Score

Variables	β	T value	P value
School	0.044	1.346	0.179
Age (continuous)	0.104	3.211	0.001
Gender (male: 1)	-0.508	-14.491	0.000
Place of Residence (rural area: 1)	-0.038	-1.183	0.237
Number of Siblings (continuous)	-0.095	-2.855	0.004
Family Type (extended family: 1)	0.006	0.194	0.846
Mother's Educational Level (primary school or less: 1)	-0.093	-2.619	0.009
Father's Educational Level (primary school or less: 1)	0.005	0.134	0.893
Economic Status (moderate or low: 1)	0.072	2.257	0.024
Smoking (yes: 1)	-0.054	-1.562	0.119
	R=0.543	R ² =0.285	F=29.80

Table 4. Risk Factors for Assigning Responsibility for Family Planning to a Single Gender

<i>Variables</i>	<i>B</i>	<i>Odds Ratio</i>	<i>(95% CI)</i>	<i>P values</i>
School	0.289	1.335	(0.741-2.404)	0.336
Age (continuous)	- 0.085	0.918	(0.804-1.049)	0.211
Gender (male: 1)	0.455	1.576	(0.879-2.827)	0.127
Place of Residence (rural area: 1)	1.000	2.719	(1.093-6.767)	0.031
Number of Siblings (continuous)	- 0.062	0.940	(0.814-1.086)	0.402
Family Type (extended family: 1)	0.814	2.257	(1.178-4.324)	0.014
Mother's Educational Level (primary school or less: 1)	0.284	1.328	(0.745-2.367)	0.335
Father's Educational Level (primary school or less: 1)	0.176	1.193	(0.690-2.062)	0.528
Economic Status (moderate or low : 1)	0.575	1.776	(1.009-3.127)	0.046
Smoking (yes: 1)	- 0.074	0.929	(0.511-1.689)	0.809
Number of Children Desired (continuous)	0.120	1.127	(0.903-1.408)	0.291
Knowing the Definition of Family Planning (no: 1)	0.439	1.552	(0.883-2.726)	0.127
Gender Roles Attitude Scale (Continuous)	- 0.030	0.971	(0.958-0.983)	0.000

Discussion

Study findings indicate a relationship between university students' knowledge of family planning and their attitudes towards gender roles. Young people are generally not informed about sexuality-related issues because subjects like sexuality, family planning and contraception are deemed private in Turkish society (Kara Ulu et al., 2015; UNICEF, 2017). Although it is hard to talk about sexuality within families, young people may get information from their mothers from time to time. Fathers, on the other hand, have almost no communication regarding this issue with young people (Kara Ulu et al., 2015). Young people wonder about sexual issues that are taboo within families (Evcili et al., 2013), and it disturbs them to talk about these issues with their parents (especially with their fathers) (Duman et al., 2015). However, secrets and bans intentionally or unwittingly imposed by society and families on issues such as sexuality,

reproduction, family planning and contraception increase the level of young people's curiosity. Young people try to satisfy their curiosity with information from the media, school (Duman et al., 2015; Kara Ulu et al., 2015; UNICEF, 2017), healthcare staff (Duman et al., 2015; Kara Ulu et al., 2015) and their friends (Kara Ulu et al., 2015; UNICEF, 2017). Countries like Denmark provide counseling services on web sites or by telephone to answer young people's questions related to sexuality and reproductive health (Graugaard et al., 2017).

Sexual issues, young age, insufficient use of contraceptives, unplanned pregnancies, intentional miscarriages and STDs affect the health of young people (UNFPA, 2017; UNICEF, 2017). It is important to determine the lack of knowledge among young people to preserve and improve their health (Herrman, 2014). Although 68.9% of our participants knew the definition of family planning, the percentages of those who

correctly and incorrectly categorized contraceptive methods as modern and traditional were quite close. Almost all married women in Turkey whose ages range between 15 and 49 are aware of any modern contraceptive methods (Hacettepe University Publication of the Institute of Health Sciences, 2013), and other studies indicate that the majority of young people know about contraceptive methods (Duman et al., 2015) and STDs (Irmak Vural, Bakir, & Oskay, 2015), and that monogamy and condom use can effectively prevent STDs despite social and family taboos (Elkin, 2015). In this study, we found that young people have information about STDs, but more than half of them only know about AIDS.

Culture, rules, values, practices and expectations affect attitudes towards gender roles. Social life in Turkey is patriarchal in slums and rural areas (Hacettepe University Publication of the Institute of Health Sciences, 2013). It is clear that male students in Turkey have more traditional patriarchal attitudes towards gender roles (Aylaz, Gunes, Uzun, & Unal, 2014; Ongen & Aytac, 2013). Parallel to the information given above, we found that the male gender has a negative effect on social gender roles. However, it is interesting that being male is not among the risk factors for assigning responsibility to a single gender for family planning decisions. This may indicate that young people get stuck between the traditional patriarchal structure of their society and globally supported gender equality. Studies conducted in Turkey suggest that males think the responsibility for family planning should be shared by couples (Bestepe, Ellidokuz, Temel & Atilgan, 2003; Ozvaris, Dogan, & Akin, 1998). However, Turkish society enables males to act more freely regarding sexual issues, and females do not have the same freedom (Duman et al., 2015; Tokuc, Berberoglu, Saracoglu, & Celikkalp, 2011), because the honor approach, which is related to females, is part of traditional patriarchal social structure. Honor means avoiding sexual behavior and remaining virgin (Gursoy & Arslan Ozkan, 2014). Another reason for males' idea that both genders should take responsibility for family planning may arise from their desire for sexual activity before marriage since this may offer the chance to satisfy their curiosity with fewer risks.

As people get older, they mature physically and emotionally, understand social rules and develop personal approaches towards them (Herrman,

2014). The outcome of this study supports this claim. As people get older, their gender roles attitude score is positively affected.

Maternal education also enhances young people's positive attitudes towards gender roles (Aylaz et al., 2014; Ongen & Aytac, 2013). As maternal education levels fall, attitudes towards gender roles are negatively affected. Turkey's education level ranks 109th among 144 countries in the 2016 Global Gender Gap Report issued by the World Economic Forum (World Economic Forum, 2016). However, the educated population in Turkey is increasing every year, and there have been significant improvements in women's educational status (Hacettepe Universitesi Saglık Bilimleri Enstitüsü Yayını, 2013). Males have better chances than women to continue their educations (Hacettepe Universitesi Saglık Bilimleri Enstitüsü Yayını, 2013; World Economic Forum, 2016). When the educational gap between the students' parents was assessed, women's educational status was found to be lower than that of their husbands (Hacettepe Universitesi Saglık Bilimleri Enstitüsü Yayını, 2013). These results indicate that supporting women's education will positively affect attitudes towards gender roles (Aylaz et al., 2014; Ongen & Aytac, 2013).

The number of children is directly related to maternal educational levels. Women who have no education deliver two times more babies than those who have a high school education or more. This increases the number of siblings at home (Hacettepe University Publication of the Institute of Health Sciences, 2013) and is another variable that negatively affected the attitudes of young people towards gender roles in this study. More siblings reflect the gender inequalities within Turkish families. Approaches towards the male and female children also differ in certain regions. Doing housework and providing care to those who are in need are deemed the responsibilities of female children (T. R. Ministry of Family and Social Policies, 2014; Kulin, 2015). As the number of siblings increases, the opportunity to get an education is granted to the male children first, and females are forced into marriage at early ages (Kulin, 2015). Women who have had no opportunity to receive education marry six years earlier than women who are high school or university graduates (Hacettepe University Publication of the Institute of Health Sciences, 2013). These examples shape new generations' attitudes towards gender roles (Kulin, 2015).

Although the participants with moderate or low economic status had positive attitudes towards gender roles, they believe more than those with high economic status that only one partner should take responsibility for family planning decisions. This result is important because it shows that young people do not think differently from the social norms and values (Hacettepe University Publication of the Institute of Health Sciences, 2013; Kulin, 2015; T. R. Ministry of Family and Social Policies, 2014). Extended families are common in rural Turkey. This family type is much more loyal to the traditions and social rules than urban nuclear families (T. R. Ministry of Family and Social Policies, 2014). The patriarchal structure of rural society is quite clear from this perspective (Hacettepe University Publication of the Institute of Health Sciences, 2013; T. R. Ministry of Family and Social Policies, 2014). Although the majority of the participants said that both partners should take responsibility for family planning, the beliefs of the participants who live in rural areas with extended families reflect this cultural structure of society. This cultural structure is significant evidence of gender awareness in health. Actions for improving gender equality are important for enhancing women's health (Pender, 2015).

As the mean score from Gender Roles Attitude Scale increased, the rate of students believing that family planning responsibility should be assigned to one gender decreased. Women are considered to be those who benefit from family planning services when these services are provided, and studies that are based on only one gender are conducted. In the family planning programs conducted in India, women were regarded as the recipients of the service, and males were assigned few responsibilities in these programs. The fact that majority of those in India who use contraceptives are females supports this outcome (Garg & Singh, 2014). In addition, the fact that decisions related to sexual and reproductive health are generally made by males should be considered as an indicator of gender inequality in family planning. However, males and females should undertake equal responsibilities for family planning. Thus, this study suggests that family planning services observing gender equality should be generated. The Global Gender Gap Report for Turkey indicates that Turkey's score was 0.585 in 2006 and 0.623 in 2016. It is clear that Turkey has made progress in closing the gender gap. This

progress should continue to ensure absolute equality between the genders (World Economic Forum, 2016).

Conclusion: The participants were found to have egalitarian approach towards gender roles. Male gender, more siblings, mother's education levels of primary school or less and smoking negatively affected attitudes towards gender roles. Risk factors for assigning the responsibility for family planning to a single gender indicate that the students from rural areas, those with extended families, and those with moderate or low economic status believe that the responsibility should belong to a single gender. Higher mean scores on the GRAS were a preventive factor, and this increased the likelihood that students believe that parents should make family planning decisions together. Study programs that deal with the males and females together should be developed to enhance gender equality and to generate an egalitarian approach towards family planning. Young people should be included in these programs.

References

- Akin, A., & Demirel, S. (2003). Total Sex Differences and Health Issues. The concept of gender and its effects on health. *C.U Faculty of Letters*, 25, 73-78.
- Aydin, M., Ozen Bekar, E., Yilmaz Goren, S., & Sungur, MA. (2016). Attitudes of nursing students regarding to gender roles. *AIBU Journal of Social Sciences*, 16, 223-242.
- Aylaz, R., Gunes, G., Uzun, O., & Unal, S. (2014). Opinions of university students on gender roles. *Sted*, 23, 183-189.
- Bakir, N., & Kızılkaya Beji, N. (2015). Evaluation of the knowledge levels of students about sexually transmitted diseases. *Duzce University Journal of the Institute of Health Sciences*, 5, 10-16.
- Bestepe, G., Ellidokuz, H., Temel, A., & Atilgan, A. (2003). Characteristics in family planning: A case from Afyon. *Sted*, 12, 180-3.
- Duman, BN., Yiilmazel, G., Topuz, S., Basci, A.B, Kocak, Y.D., & Buyukgonenc, L. (2015). The knowledge, attitudes and behaviors of the university youth about reproductive health and sexual health. *Yildirim Beyazit University Faculty of Health Sciences E-Journal of Nursing*, 3, 19-32.
- Elkin, N. (2015). Investigation on the knowledge of undergraduate students' about sexually diseases. *Mersin Univ. Journal of Health Sciences*, 8, 1-14.
- European Commission. (2010). Strategy for equality between women and men 2010-2015. Retrieved from http://ec.europa.eu/justice/gender-equality/files/documents/strategy_equality_women_men_en.pdf

- Evcili, F., Cesur, B., Altun, A., Guctas, Z., & Sumer, H. (2013). The premarital sexual experience: Opinions and attitudes of students from midwifery department. *Gumushane University Journal of Health Sciences*, 2, 486-498.
- Garg, S., & Singh, R. (2014). Need for integration of gender equity in family planning services. *Indian J Med Res*, 140, 147-51.
- Graugaard, C., Nielsen, VM., Jensen, SØ., Koch, H., Ogstrup, AJ., Jakobsen, MF., & Hald, J. (2017). What does Danish youth want to know about sex? Twenty years of telephone counseling on sexual and reproductive issues. *J Sex Marital Ther*, 43, 159-168.
- Gursoy, E., & Arslan Ozkan, H. (2014). Turkish young people's perception of sexuality / "Honor" in relation to women. *Journal of Psychiatric Nursing*, 5, 149-159.
- Hacettepe University Publication of the Institute of Health Sciences. (2013). Turkish Population and Health Survey. Ankara, Turkey: Author. Retrieved from http://www.hips.hacettepe.edu.tr/tnsa2013/rapor/TNSA_2013_ana_rapor.pdf
- Healthy People 2020. (2010). Retrieved from https://www.healthypeople.gov/sites/default/files/HP2020_brochure_with_LHI_508_FNL.pdf
- Herrman, JW. (2014). Fast facts on adolescent health for nursing and health professionals: A care guide in a nutshell. New York: United States.
- Hines, M. (2010). Sex-related variation in human behavior and the brain. *Trends in Cognitive Sciences*, 14, 448-456.
- Irmak Vural, P., Bakır, N., & Oskay, U. (2015). Evaluation of the knowledge levels of vocational school students about sexually transmitted infections. *KASHED*, 2, 58-70.
- Kara Ulu, N., Demir, H., Tasar, MA., & Dallar, YB. (2015). The knowledge of sexually transmitted diseases among adolescents in a low socioeconomic area of Ankara. *Turkish J Pediatr Dis*, 1, 32-38.
- Kulin, A. (2015). Kardelenler-Cagdas Cagdai Girls from Turkey. Istanbul, Turkey: Remzi Kitabevi.
- Lwanga, SK., & Lemeshow, S. (1991). Sample Size Determination in Health Studies: A Practical Manual. Geneva: World Health Organization.
- Ongen, B., & Aytac, S. (2013). Attitudes of university students regarding to gender roles and relationship with life values. *Sociology Conferences*, 48, 1-18.
- Ozvaris, SB., Dogan, BG., & Akin, A. (1998). Male involvement in family planning in Turkey. *World Health Forum*, 19, 76-8.
- Pender, N.J., Murdaugh, C., & Parsons, MA. (2015). *Health Promotion in Nursing Practice* (7th Edition). USA: Pearson Education.
- Sahin, M., & Gultekin, M. (2013). In general, gender equality is the policy of women and families in the political arena. Family academy association. Retrieved from http://www.muhamrembalci.com/hukukdunyasi/alin_tilar/282.pdf
- Simsek, Z., & Kirmizitoprak, E. (2013). The effect of peer education on the healthy-life knowledge and behavior of young seasonal farm workers. *Turkish Journal of Public Health*, 11, 1-10.
- Sustainable Development Knowledge Platform. (2017). Transforming our world: the 2030 Agenda for Sustainable Development. Retrieved from <https://sustainabledevelopment.un.org/post2015/transformingourworld>
- The Millennium Development Goals Report 2015. (2015). Retrieved from http://www.un.org/millenniumgoals/2015_MDG_Report/pdf/MDG%202015%20Summary%20web_english.pdf
- T. R. Ministry of Family and Social Policies. (2014). Research on Family Structure in Turkey Findings and recommendations. Turgut M, Fezzioglu S (Ed.), Research and Social Policy (p:31). Istanbul : Cizge Tanitim ve Kirtasiye Ltd. Sti.
- Tokuc, B., Berberoglu, U., Saracoglu, GV., & Celikkalp, U. (2011). Opinions of health college students on premarital sex, induced abortions and contraceptive use of young people. *Turkish Journal of Public Health*, 9, 166-173.
- UNFPA. (2017). Family Planning. Retrieved from <http://prod.turkey.unfpa.org/en/topics/family-planning>.
- UNICEF. (2017). Health of Young People. Retrieved from <http://unicef.org.tr/sayfa.aspx?id=49>
- United Nations Development Programme Turkey (UNDP), (2017). Toplumsal cinsiyet eşitligi. Retrieved from <http://www.tr.undp.org/content/turkey/tr/home/our-work/gender-equality.html>
- World Economic Forum. (2016). The Global Gender Gap Report 2016. Retrieved from http://www3.weforum.org/docs/GGGR16/WEF_Global_Gender_Gap_Report_2016.
- World Health Organization. (2016). Family planning/Contraception. Retrieved from <http://www.who.int/mediacentre/factsheets/fs351/en/>
- Zeybekoglu Dunder, O. (2012). The reflection of gender roles in television advertisement. *ETHOS: Dialogues in Philosophy and Social Sciences*, 5, 121-136.
- Zeyneloglu, S., & Terzioglu, F. (2011). Development and psychometric properties gender roles attitude scale. *H. U. Journal of Education*, 40, 409-420.