

Original Article

Determination of Knowledge and Attitudes of a Private Vocational High School Students about Family Planning

Aysegul Muslu, PhD

Lecturer, Izmir Kavram Vocational School, Medical Techniques and Services, Izmir, Turkiye

Correspondence: Aysegul Muslu, PhD, Lecturer, Izmir Kavram Vocational school, Medical Techniques and Services, Izmir, Turkey. e-mail: aysegul.muslu@kavram.edu.tr

Abstract

Objective: The aim of this study was to determine the knowledge about family planning methods, willingness to receive family planning education and attitudes of students studying in associate degree health programmes at a private university.

Methods: The study is of descriptive cross-sectional type. The population of the study consisted of 220 students studying in the health programme of a private vocational school. Individual introduction form and family planning attitude scale were used to collect the data. The study data were collected by applying the individual introduction form and family planning attitude scale.

Results: The mean age of the students participating in the study was 21.27 ± 3.93 years and the mean age of sexual experience was 18.67 ± 1.89 years. It was found that two thirds of the students had no knowledge about family planning and they wanted to receive education. 40.5% of the students stated that they wanted to receive education from health personnel. The family planning method known by 39.0% of the students was condom. A statistically significant difference was found between the sexual experiences of the students and attitudes towards society and attitudes towards methods ($P < 0.05$).

Conclusion: There are limited studies on family planning knowledge, methods and attitudes in higher education. It is also stated in global health initiatives and sustainable development goal that all individuals should have access to family planning services. Updating the education curricula of students and adding family planning courses will be one of the important steps in achieving sustainable development goals in family planning.

Keywords: Contraceptive methods, education, family planning, knowledge, student.

Introduction

Family planning (FP) is the planning of parenthood in a way that enables persons to have as many children as they desire, when they desire, and to define pregnancy intervals in a way that contributes to the development of the country (Soleymani et al., 2015). Family planning (FP) is an important component of global public health, with implications for maternal and child health, gender equality and socioeconomic development. Several global health initiatives and sustainable development goals state that all members of society should have access to family planning services (Grabowska et al., 2020). It is reported that about 210 million women worldwide become pregnant each year and that about half of these women

become pregnant unintentionally (Bolarinwa et al., 2020). Family planning methods include oral contraceptive pills, injections, vaginal rings, intrauterine devices, condoms and sterilization for men and women, lactational amenorrhea, withdrawal and fertility awareness-based methods (Yanikkerem and Ustgorul, 2019). Contraceptive use provides protection from pregnancy and postpones women's first pregnancy (Rizkianti et al., 2024). Family planning According to the data of the Turkish Statistical Institute for 2023, 15% of Turkey's population is young (WHO, 2024). Knowledge about and use of family planning methods positively contributes to the health of young people and positively affects their educational and economic outcomes. According to the results of the Turkey

Demographic and Health Survey, 14.7% of women under the age of 18 are married or living with a partner (Bekele, 2021). Although there are many studies on the knowledge, frequency of use and knowledge level of family planning methods among married individuals in Turkey, there is a limited number of studies on the knowledge, use and family planning attitudes of young people studying at universities. In addition, the number of universities that provide family planning education in the curriculum of students studying in health programs of health service vocational schools is insufficient. This study is important to determine the knowledge, willingness to receive education on family planning and family planning attitudes of students studying in health schools.

Materials and Methods

Purpose and Type of Research: This study was conducted to determine the knowledge status of students studying in associate degree health programs about family planning methods, their desire to receive family planning education and their attitudes. This is a descriptive cross-sectional study.

Hypotheses of the Study;

H₁: There is no difference between family planning knowledge and attitudes of university students.

H₂: There is a difference between family planning knowledge and attitudes of university students.

Study Population: The population of the study consisted of a total of 343 students enrolled in operating room services, anesthesia, first and emergency aid, dialysis, medical documentation and secretarial, medical laboratory techniques and medical imaging techniques programs enrolled in the second year of a private university in Izmir. In the study, no sample selection was made and it was aimed to reach all students. Students who voluntarily accepted to participate in the study and completed the data collection tools completely were included in the study. Students who did not fully answer the questions in the data collection form (73 students) and did not show up for the final exam (50 students) were not included in the study. The sample of the study consisted of a

total of 220 students enrolled in operating room services, anesthesia, first and emergency aid, dialysis, medical documentation and secretarial, medical laboratory techniques and medical imaging techniques programs in the second year of the department of medical techniques and services of the university who came to the final exam and answered all the questions in the data collection form.

Data Collection Materials: The study data were collected by applying the individual introduction form and family planning attitude scale

Individual Introduction Form: The Individual Information Form, prepared by the researcher, consisted of 18 questions inquiring about the identifying characteristics of the students (age, marital status, education, place of residence, etc.).

Family Planning Attitude Scale: The Family Planning Attitude Scale (FPAS) developed by Orsal and Kubilay (2006) is Likert-type and consists of 34 items (Orsal and Kubilay, 2006). Items are scored from 1 to 5 for each statement in the questionnaire. "Strongly Agree response gets 1 point", "Agree 2 points", "Undecided 3 points", "Disagree 4 points", "Strongly Disagree 5 points". There are no statements in the scale that need to be reverse coded. A minimum of 34 and a maximum of 170 points can be obtained from the scale. The scale has three sub-dimensions: "Society's Attitude towards Family Planning", "Attitude towards Family Planning Methods" and "Attitude towards Childbirth". The scale consists of three sub-dimensions: attitudes towards community planning, attitudes towards family planning and attitudes towards childbirth. The number of items that make up "Society's Attitude Towards Family Planning", one of the subdimensions of the questionnaire, is 15 and a minimum score of 15 and a maximum score of 75 can be obtained from this subdimension. The number of items comprising the sub-dimension "Attitudes Towards Family Planning Methods" is 11.

A minimum of 11 and a maximum of 55 points can be obtained from this sub-dimension. The number of items of the "Attitude Towards Childbirth" sub-dimension of the scale is 8 and a minimum of 8 and a maximum of 40 points can be obtained from this sub-

dimension. Cronbach's alpha of the questionnaire was found to be 0.905 and 0.934 in this study.

Data Gathering Process: Data collection tools were used to collect research data. In order to reach the majority of the students, the data were collected during the final exam week. Within the scope of the research, 220 students were reached. Students who did not show up for the final exam and did not agree to participate in the study were excluded. In addition, students who did not study in health-related departments were excluded from the scope of the study

Study Limitations: This study was conducted in a single university. The outcomes cannot be generalized to all students studying at the vocational school of health services.

Data Analysis: IBM SPSS Statistics Version 26.0 package program was used for data analysis. In the study, descriptive statistics such as number, percentage, mean, standard deviation were used to evaluate the data related to descriptive characteristics. Kolmogorov-Smirnov test was performed to determine whether the Family Planning Attitude Scale scores of the students showed normal distribution and it was determined that they were in accordance with the normal distribution. One Way Anova (F) was used when three or more groups were compared and independent samples t-test was used when two groups were compared. The group showing significant difference was determined by post-hoc test. Statistical significance was evaluated as $p < 0.05$. The limitation of the study is that it was conducted only in students studying at one university. Therefore, the results obtained from the study cannot be generalized to all health vocational school students in Turkey.

Ethical Issues: Ethics committee approval for the study was obtained from Izmir Bakircay University, Turkey (Protocol No: 1228). In addition, written permission to conduct the study was obtained from Izmir Kavram Vocational High School on 06.08.2023. Participation in the study was voluntary and data collection was carried out after the submission of an informed consent form signed in writing by each student

Results

The majority of the participants were second-year students studying in the dialysis program. Of the students in the research group, 38.6% were in the age group of 20 years, 84.1% were female, 39.5% were graduates of Anatolian High School, 62.3% lived in the longest place and almost all of them were single. Most of the participants had no knowledge about family planning and thought that education on family planning was necessary. More than half of the participants knew one of the family planning methods. 40.5% of the students would like to receive education on family planning from health personnel. Almost half of the participants stated that condom is the protective method against sexually transmitted infections. 27.3% of the participants had sexual experience before. The mean age of the students was 21.27 ± 3.93 years. The mean age of sexual experience was 18.67 ± 1.89 years (Table 1).

The mean score of the students on the family planning attitude scale was 141.7 ± 19.3 . The minimum value obtained from the scale was 34 and the maximum value was 170. (Table 2).

There was a significant difference ($P < 0.05$) between the department in which the students studied and the attitudes towards the community sub-dimension and the family rating attitude scale. The attitude towards community sub-dimension of the students studying in the medical documentation and secretarial program was found to be higher than the students studying in other programs. The mean score of the family planning attitude scale was higher in students studying in the first and emergency aid and medical documentation and secretarial programs. A significant difference was found between the gender of the students and the sub-dimension of the scale related to society and the family planning attitude scale ($P < 0.05$). In terms of gender, the difference was found to be due to male students. There was no statistically significant difference between the high school the students graduated from and the sub-dimensions of the scale and the family planning attitude scale ($P > 0.05$).

A statistically significant difference was found between the place of longest residence and the sub-dimension of the scale related to society ($P<0.05$). The sub-dimension related to society was found to be significant in students living in the longest district. A statistically significant difference was found between the sexual experience of the students and the attitude towards society and the attitude towards methods ($P<0.05$). A statistically significant difference was found between the alcohol use status of the students and the attitude towards society, attitude towards pregnancy and attitude towards family planning scale ($P<0.05$). A significant difference was found in students who never smoked or smoked less in social settings. There was a statistically significant difference ($P<0.05$) between students' smoking and the pregnancy sub-dimension of the scale (Table 3). In this study, the Cronbach alpha value of

the family planning attitude scale was found to be 0.934.

Discussion

It is stated that the young population in Turkey tends to increase, the age of sexuality decreases, and they do not have sufficient knowledge about family planning methods. The mean age of the students participating in the study was 21.27 ± 3.93 . In studies examining family planning knowledge and attitudes with university students, the average age was found to be 19.28 ± 3.93 (Sari et al., 2023), 20.31 ± 1.215 (Cetinkaya et al., 2022), 20.47 ± 1.98 (Sen et al., 2019), 21.9 ± 2.9 (Calikoglu et al., 2017). In another study conducted in Uganda, the average age of students was found to be 17.3 ± 2.1 years (Kigongo et al., 2024). Our study is similar to the literature.

Table.1 Distribution of Students According to Socio-demographic Characteristics

Variables	n	%
Registered Programs		
Medical documentation and secretariat	17	7.7
Anesthesia	38	17.3
First and emergency aid	30	13.6
Operating room services	25	11.4
Medical laboratory techniques	40	18.2
Dialysis	45	20.5
Medical imaging techniques	25	11.4
Age		
19 years and under	51	23.2
20 years old	85	38.6
Over 20 years old	84	38.2
Gender		
Woman	185	84.1
Male	35	15.9
Graduated high school		
Imam hatip high school	7	3.3
Anatolian high school	87	39.5
Open high school	10	4.5
College/Private high school	40	18.2
Vocational high school	76	34.5
Longest lived place		
Village/Town	15	6.8

District	68	30.9
Province	137	62.3
Marital Status		
Married	8	3.6
Single	212	96.4
Knowledge of family planning		
There is	64	29.1
No	156	70.9
Known family planning methods		
I don't know	90	40.9
Condom	86	39.0
Withdrawal	9	4.1
Pill	25	11.4
Needle	10	4.6
Place where family planning education is desired		
School	80	36.4
Family	26	11.8
Friend	10	4.5
TV-newspaper-magazine	15	6.8
Health personnel	89	40.5
Preventive methods against known sexually transmitted diseases		
I don't know	113	51.0
Condom	86	39.0
Withdrawal	3	1.5
Female and male sterilization	5	2.5
Intrauterine device	13	6.0
Thoughts about receiving family planning education		
Required	157	71.4
Undecided	50	22.7
Unnecessary	13	5.9
Sexual Experience		
No	160	72.7
There is	60	27.3
Alcohol Use		
I never drink	63	28.6
I drink less in social situations	106	48.2
Irregularly, but when I drink, I drink a lot.	27	12.3
I drink regularly	24	10.9
Smoking		
Drinking	103	46.8

Non-drinker	117	53.2
Total	220	100.0

Table 2. Mean Scores of the Students' Family Planning Attitude Scale

(FPAS)/sub-dimensions	$\bar{X} \pm SD$	Min-Max
Attitudes towards society	64.8± 8.6	30-75
Attitude towards the method	43.3± 8.7	22-55
Attitude towards pregnancy	33.0± 5.6	13-40
Family planning attitude scale	141.7± 19.3	68-170

Table 3. Comparison of Family Planning Attitude Scale Scoring and Subscore Means According to Some Characteristics of Students

Feature	Attitudes Towards Society (X± SD)	Attitude Towards the Method (X± SD)	Attitude Towards Pregnancy (X± SD)	Family Planning Attitude Scale (X± SD)
Registered Programs				
Medical documentation and secretariat	57.52±13.52	40.94±8.29	30.88±6.29	129.35±23.67
Anesthesia	65.42±7.13	42.86±8.24	32.65±4.38	140.94±16.95
First and emergency aid	68.10±5.22	45.70±9.24	34.96±4.20	148.76±14.66
Operating room services	66.16±5.55	44.24±7.63	32.60±5.90	143.00±15.41
Medical laboratory techniques	63.17±11.01	46.70±9.51	33.62±6.69	143.50±25.98
Dialysis	64.00±7.98	41.33±8.61	32.33±5.68	137.66±17.19
Medical imaging techniques	68.32±5.60	44.56±8.10	33.72±5.18	146.60±15.54
F	4.193	2.035	1.326	2.599
P	0.001	0.062	0.247	0.019
Gender				
Woman	66.13±6.53	44.20±8.49	33.32±5.43	143.66±16.92
Male	59.34±13.28	42.28±9.33	31.97±5.43	133.60±25.11
T	4.610	1.223	1.334	2.955
P	0.000	0.308	0.481	0.000
Graduated high school				
Imam hatip high school	66.19±6.10	44.42±6.99	34.57±4.75	145.71±16.28
Anatolian high school	65.48±7.14	44.05±8.70	32.87±5.22	142.41±17.33
Open high school	62.00±11.99	41.90±9.15	33.70±6.34	137.60±24.05
College/Private high school	64.50±9.93	43.40±9.26	32.42±6.46	140.32±21.73
Vocational high school	64.63±19.28	44.01±8.79	33.38±5.63	142.02±20.27
F	0.492	0.174	0.369	0.267
P	0.741	0.951	0.830	0.899
Longest lived place				
Village/Town	59.80±13.85	43.26±8.71	33.00±6.41	136.06±24.24

District	65.98±7.98	43.75±9.41	33.26±5.66	143.00±19.39
Province	64.90±8.10	43.94±8.47	32.96±5.53	141.81±18.84
F	3.210	0.045	0.066	0.785
P	0.042	0.956	0.936	0.458
Sexual Experience				
No	64.08±10.28	45.80±8.55	33.31±6.46	143.20±21.74
There is	65.19±7.95	43.10±8.73	32.96±5.28	141.25±18.47
T	-0.848	2.053	0.416	0.117
P	0.019	0.041	0.094	0.509
Alcohol Use				
I never drink	65.76±6.66	44.07±8.29	33.68±4.59	143.52±16.19
I drink less in social situations	65.76±8.27	44.32±9.03	33.54±5.43	143.63±19.59
Irregularly, but when I drink, I drink a lot.	65.03±6.66	43.18±8.62	32.62±6.81	140.85±15.87
I drink regularly	58.58±13.47	41.79±8.97	29.75±6.50	130.12±25.81
F	5.108	0.608	0.608	3.522
P	0.002	0.611	0.017	0.016
Smoking				
Drinking	64.82±8.43	43.99±8.83	33.47±6.10	142.29±20.00
Non-drinker	64.94±8.86	43.70±8.71	32.69±5.14	141.34±18.89
T	-0.105	0.244	1.033	0.362
P	0.868	0.468	0.041	0.262

* When three or more groups are compared, the value of Anova (F) and independent samples t-test in paired groups are given

Discussion Cont.

In our study, 39% of the students knew condom as a family planning method. In a study conducted with university students in Karachi, Malaysia, Malawi, Romania and Portugal, the majority of students stated that they knew condoms as a family planning method (Khan et al., 2024; Chimatiro et al., 2022; Grabowska et al., 2020; Blidaru et al., 2016; Soleymani et al., 2015). In a study conducted in Adiyaman and Trabzon, it was found that the majority of students had condoms (Sari et al., 2023; Colgecen and Colgecen, 2022).

It was found that 39.5% of the students who participated in our study were graduates of Anatolian high schools. In the study conducted by Cetinkaya et al., it was reported that 66.7% of the students were Anatolian high school graduates (Cetinkaya et al., 2022). In our study, 40.5% of the students stated that they would like to receive training on family planning from health personnel. In

the study conducted by Yanikkerem and Ustgorul, it was determined that 36.5% of the students wanted to receive family planning education from health personnel (Yanikkerem and Ustgorul, 2019).

In our study, 27.3% of the students had sexual experience. In a study conducted with students studying in the department of nursing in Manisa, it was found that 20.4% of the students had sexual experience (Yanikkerem and Ustgorul 2019). In a study conducted with students studying at four different universities, 44.9% of the students had sexual experience (Aslan et al., 2014).

In our study, the mean score of the students on the family planning attitude scale was 141.7±19.3). In the study conducted by Kaplan et al., with nursing students, the mean score of the family planning attitude scale was found to be 119.8±21.3 (Kaplan et al., 2020). In the study conducted by Sen and colleagues with midwifery department students, the mean total score of the family planning attitude

scale was 137.07 ± 17.60 (Sen et al., 2019). In the study conducted by Bilgin with nursing students, the mean total score of the family planning attitude scale was 128.50 ± 26.94 (Citak, 2019). Our study is similar to the literature.

In our study, the mean scores of the students in the subscale of the family planning scale related to the community, subscale related to the method, and subscale related to pregnancy were 64.8 ± 8.6 , 43.3 ± 8.7 , and 33.0 ± 5.6 , respectively. In the study conducted by Kaplan et al., with nursing students, the averages were 52.9 ± 12.6 , 36.9 ± 6.8 , 28.10 ± 6.68 , 117.9 ± 22.7 , respectively, in the subscale related to the community, subscale related to the method, and subscale related to pregnancy of the family planning scale (Kaplan et al., 2020). In the study conducted by Sen et al. with midwifery students, the averages in the subscale of the family planning scale related to the community, subscale related to the method, and subscale related to pregnancy were found to be 58.23 ± 6.88 , 33.81 ± 6.94 , 40.43 ± 6.35 , respectively (Sen et al., 2019).

Conclusion: Most of the students studying in vocational schools of health services have no knowledge about family planning. Almost half of the students want to receive education about family planning from health personnel. The most widely known family planning method is the condom. The age of young people's first sexual experience is decreasing, but despite studying in health programs, many programs do not include family planning and sexual health in the curriculum. In order to reduce sexually transmitted diseases and prevent unwanted pregnancies, family planning, sexual and reproductive health courses should be included in the curricula. Since sexuality and reproductive rights are international human rights for young people, they should be provided with the necessary services, education and support.

Acknowledgements: I would like to thank all the students who participated in this study.

References

Aslan E., Bektas E., Basgol S., Demir S., Vural, P.I. (2014). Knowledge and behaviour of university students related to sexual health. *Sted*, 23(5): 174-182.

- Bekele D., Surur F., Nigatu B., Teklu A., Getinet T., Kassa M., Gebremedhin M., Gebremichael B., Abeshe Y. (2021). Knowledge and Attitude Towards Family Planning Among Women of Reproductive Age in Emerging Regions of Ethiopia. *Journal of Multidisciplinary Healthcare*, 6-1. Doi: <https://doi.org/10.1155/2023/9649792>.
- Blidaru IE., Furau G., Socolov D. (2016). Female Romanian university students' attitudes and perceptions about contraception and motherhood. *Eur J Contracept Reprod Health Care*, 21(1):39-48.
- Bolarinwa AO., Victor C., Olagunju O., Saeed BQ. (2020). Perceptions on abortion and long-acting contraceptive use among women of reproductive age in selected nigerian states: A cross-sectional study. *The Open Public Health Journal*, 13:829-838. Doi: <https://doi.org/10.2174/1874944502013010829>.
- Calikoglu EO., Bedir B., Yilmaz S., Aydin A. (2017). Health knowledge of medical students about family planning and sexually transmitted diseases, *Fam Pract Palliat Care*, 2(2):12-17. Doi: <https://doi.org/10.22391/920.321473>.
- Chimatiro CS., Mpachika MF., Tshotetsi L., Hajison PL. (2022). School-going adolescent girls' preferences and views of family planning services in Phalombe district, Malawi: A descriptive, cross-sectional study. *PLoS ONE*, 17(5): e0267603. doi: <https://doi.org/10.1371/journal.pone.0267603>.
- Cetinkaya SS., Calis GG., Kibris S., Topal M. (2022). Effectiveness of virtual patient simulation versus peer simulation in family planning training in midwifery students: a comparative educational intervention. *Interactive Learning Environments*, 3(32): 942-951. doi: 942-951. doi: <https://doi.org/10.1080/10494820.2022.2105897>.
- Citak BN. (2019). Gender equality among nursing students between perception of family planning and attitudes towards family planning relationship. *Electronic Journal of Social Sciences*, 3(5): 109-125 doi: <http://dx.doi.org/10.29228/sbe.39910>.
- Colgecen TEF., Colgecen K. (2022). An assessment of third grade medical students' level of knowledge and attitudes about family planning. *Turkey Journal of Health Literacy*, 3(1): 19-25 doi: 10.54247/SOYD.2022.44.
- Gavas E., Inal S. (2019). The family planning methods using status and attitudes of women in Turkey: A systematic review. *Journal of Health and Life Sciences*, 1(2): 37-43. DOI: 10.33308/2687248X.201912118.

- Grabowska P., Lewoc M., Jakubowicz-Zalewska O., Mierzejewska P., Baran A., Flisiak I. (2020). What do you know about sexually transmitted infections? Survey concerning knowledge and risky behaviors among students of Białystok Universities. *Przegl Epidemiol*, 74(2):370-82.
- Kaplan B, Dirgar E, Avci S, Guler S, Ortabag T, Ozkurt E, Tekkanat T. (2020). Evaluation of knowledge levels of male nursing students about family planning: A foundation university sample. *Zeugma Health Res.*, 2(3):107-113.
- Khan J., Ali M., Bibi A., Maqсад S., Tahseen S., Shah HS., Javeed S., Zeeshan S. (2024). Knowledge of Family Planning among Nursing Students at a Private Institute Karachi. *Pakistan Journal of Health Sciences*, 5(3): 85-88. Doi: <https://doi.org/10.54393/pjhs.v5i03.1321>.
- Kigango G., Tumwesigye R., Anyolitho KM., Musinguz M., Kwizera G., Achan E., Nabasiye KC., Udho S., Kabunga A. (2024). Bernard Omech. Access to family planning services and associated factors among young people in Lira city northern Uganda. *BMC Public Health*, 24: 1146 <https://doi.org/10.1186/s12889-024-18605-8>
- Orsal O, Kubilay G. (2007).Development of family planning attitude scale. *Journal of Istanbul University Florence Ninhtingale School of Nursing*,15(60):155-164.
- Rizkianti A., Kistiana S., Fajarningtiyas DN., Hutasoit EF., Baskoro AA., Maryani H., Titisar AS., Sari DP., Naibaho MMP., Melissa M., Muthmainnah M. (2024). Understanding the association between family planning and fertility reduction in Southeast Asia: a scoping review. *BMJ Open*;14:e083241. Doi:10.1136/bmjopen-2023-083241.
- Soleymani S., Abdul Rahman H., Lekhray R., Mohd Zulkefli NA., Matinnia NA. (2015). Cross-sectional study to explore postgraduate students' understanding of and beliefs about sexual and reproductive health in a Public University Malaysia. *Reprod Health*,12:77.
- Sari, C., Adiguzel, L., Demirbag, CB. (2023). Knowledge About Family Planning and Sexually Transmitted Diseases Among University Students. *Turkish Journal of Family Medicine and Primary Care*, 17(1):50- 61. doi:10.21763/tjfmpe.1126454.
- Sen S., Gulsen BO., Sezer G., Koken DS. (2019). Determination of family planning attitudes of midwifery students. *Medical Sciences (NWSAMS)*,14(3):146-153, DOI: 10.12739/NWSA.2019.14.3.1B0076.
- Turkey Demographic and Health Survey. (2018). https://fs.hacettepe.edu.tr/hips/dosyalar/Ara%C5%9Ft%C4%B1rmalar%20-%20raporlar/2018%20TNSA/TNSA2018_ana_Rapor_compressed.pdf (Access Date: 12.07.2024).
- Turkey Demographic and Health Survey. (2018). https://fs.hacettepe.edu.tr/hips/dosyalar/Ara%C5%9Ft%C4%B1rmalar%20-%20raporlar/2018%20TNSA/TNSA2018_ana_Rapor_compressed.pdf (Access Date: 12.07.2024).
- World Health Organization. (2023). <https://www.who.int/news-room/fact-sheets/detail/family-planning-contraception> (Access Date: 12.07.2024).
- Yanikkerem E., Ustgorul S. (2019). The thoughts about sexual health education of nursing students who took and did not take sexual health course. *Journal of Inonu University Vocational School of Health Services*, 7(1):12-27. DOI:10.33715/inonusaglik.469855.