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HEALTHCARE PROFESSIONALS' INCLINATION TO ETHICAL VALUES AND ETHICAL ATTITUDES TOWARD SEXUAL-REPRODUCTIVE HEALTH

Halime Abay[1], Feride Mualla Alagöz[2], Özlem Moraloğlu Tekin[2]

[1]Nursing Department, Ankara Yıldırım Beyazıt University Faculty of Health Sciences, Ankara, Türkiye

[2]Department of Obstetrics and Gynecology, Ministry of Health Ankara Bilkent City Hospital, Ankara, Türkiye

Correspondence:
Halime Abay (e-mail: halimeabay1@gmail.com)

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Ankara Yıldırım Beyazıt University Faculty of Medicine
Department of Family Medicine

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Abstract

Objectives: Women's healthcare professionals' ethical values and attitudes regarding sexual-reproductive health are pivotal in guiding their ethical decision-making when confronted with moral issues and dilemmas in this field. This study investigated healthcare professionals' inclination toward ethical values, their ethical attitudes toward sexual-reproductive health, and the effect of gender on those attitudes.

Materials and Methods: This descriptive cross-sectional study was performed between May 1, 2022, and October 30, 2022. The study sample comprised 106 doctors, 108 nurses, and 96 midwives from a maternity hospital (n=310). Participants were recruited using stratified random sampling. Data were collected using a Personal and Professional Information Form, the Inclination to Ethical Values Scale, and the Ethical Attitudes Towards Sexual-Reproductive Health Behaviors and Practices Survey.

Results: Participants had a mean inclination to ethical values score of 69.56±10.32. Most participants had ethical attitudes toward sexual life, family planning, HIV/AIDS, virginity testing, female genital mutilation, and domestic violence against women. Less than half of the participants had ethical attitudes toward abortion, assisted reproductive techniques, prenatal diagnosis and screening, and caesarean section. Participants' attitudes were in line with legal regulations. Gender significantly affected participants' ethical attitudes toward sexual-reproductive health behaviors and practices ($p<0.05$). Participants were protective of their gender.

Conclusion: Ethical issues in sexual-reproductive health affect women more than men. Women's autonomy takes on heightened significance. Healthcare professionals often encounter ethical problems in sexual-reproductive health. Governments should take ethical values into account when regulating laws in this field. Healthcare professionals' awareness and knowledge about reproductive ethics should be increased.

Keywords: Ethics, sexual health, reproductive health, delivery of health care, gender.

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Introduction

Ethics is concerned with the values, norms, and rules by which individuals decide what is right/good and what is wrong/bad. Medical ethics, a subset of professional ethics, is concerned with establishing the principles and guidelines that guide the actions and conduct of healthcare professionals. It defines what health professionals should do and what they should refrain from doing to ensure proper and ethical behavior in medical relationships and medical practices.[1] Medical ethics also serves as a guiding and self-regulatory framework for the professional conduct of healthcare professionals. It helps ensure that their actions and decisions align with ethical standards and principles within the field of medicine.[2] Beneficence, nonmaleficence, respect for autonomy, and justice are the basic principles of medical ethics.[3] Ethical values are principles or guidelines that provide direction and justification for one's behavior. They offer a moral framework that guides individuals in making decisions and taking actions that are considered morally right or justifiable.

Having sexual-reproductive health means that one has a satisfying and safe sex life and has the freedom to make decisions about the use of one's reproductive abilities. Sexual-reproductive health services involve promoting sexual health, improving perinatal and neonatal care, eliminating unsafe abortion, providing high-quality services for family planning [infertility services], combating sexually transmitted infection [acquired immunodeficiency syndrome (AIDS)], and prevention of gynecologic cancer.[4]

Healthcare services are advancing in tandem with the progress of medicine and technology. Advances in medical research, diagnostic tools, treatment options, and healthcare delivery systems contribute to better patient care and outcomes, ultimately enhancing the quality of health services. While these advancements address numerous health issues, they also give rise to ethical dilemmas and challenges, particularly in the realm of sexual-reproductive health. This is where complex decisions regarding human life are made, leading to ethical questions and considerations. Ethical problems sometimes result in ethical violations, negatively affecting the health of women, who are more likely to experience sexual-reproductive health problems than men. Women, often influenced by social, cultural, and economic factors, can be more vulnerable than men in certain situations. Consequently, it is the responsibility of all healthcare professionals offering services in the field of women's health to uphold the principles of respect for women's choices and prevent any ethical violations.[5] Therefore, healthcare professionals should be aware of ethical issues and adhere to ethical rules in the field of sexual-reproductive health. In this context, "Sexual Rights: An International Planned Parenthood Federation Declaration" is a critical tool for all healthcare professionals offering services in the field of women's health.[6]

Healthcare professionals providing sexual-reproductive health services encounter ethical challenges encompassing various aspects of sexual-reproductive life. These include issues related to sexual activity,

contraception and family planning, abortion, prenatal diagnosis and screening, cesarean section, assisted reproductive techniques (ARTs), human immunodeficiency virus (HIV)/AIDS, virginity testing, female genital mutilation (FGM), and domestic violence against women.[4,7] In situations that demand ethical decision-making within the realm of sexual-reproductive health, healthcare professionals need to adopt a sensitive approach, possess extensive knowledge, maintain an ethical attitude, and draw upon their experience. These qualities are of paramount importance in navigating the intricate and sensitive nature of these issues and in ensuring that ethical standards are upheld while providing appropriate and respectful care to patients.[1,2] Therefore, health professionals should maintain a high level of awareness regarding ethical challenges and dilemmas associated with sexual-reproductive health. The secondary objective of the present study was to encourage healthcare professionals [doctors, midwives, and nurses] to perform self-assessments and raise their awareness of this issue.

While there is a large body of research on sexual-reproductive health, only a few researchers have addressed healthcare professionals' ethical attitudes toward sexual-reproductive health behaviors and practices.[8] Ethics committee opinions on this issue are noteworthy,[9] because there are still many ethically controversial behaviors and practices related to sexual-reproductive health. Furthermore, ethical issues related to sexual-reproductive health are more related to women because certain reproductive processes (e.g., pregnancy, childbirth, and infertility treatments) primarily involve women's bodies. However, only a few studies investigate the effect of gender on ethical attitudes. Healthcare professionals' sexual-reproductive health practices and ethical attitudes are very important because they are critical decision-makers. Therefore, this study investigated healthcare professionals' inclination toward ethical values, their ethical attitudes toward sexual-reproductive health, and the effect of gender on those attitudes.

Research questions

Q_1. What is healthcare professionals' inclination toward ethical values?

Q_2. What kind of ethical attitudes do healthcare professionals hold toward sexual-reproductive health behaviors and practices?

Q_3. Does gender affect healthcare professionals' ethical attitudes toward sexual-reproductive health behaviors and practices?

Materials and Methods

Research design and setting

This descriptive cross-sectional study was conducted between May 1, 2022, and October 30, 2022, in a maternity hospital. The research was reported according to the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) checklist.[10]

The study population consisted of 1028 healthcare professionals, including 347 doctors, 358 nurses, and 323 midwives. In situations where the population size is known, it is possible to calculate a sample size that can effectively and accurately represent the entire population. To calculate a sample size that can be representative of the population, the following values were used in the equation: p (probability of occurrence) and q (probability of non-occurrence) set at 0.5, d (sampling error) set at 0.05, t (critical value from the t-table) set at 1.96 for a specific level of significance. With these values, the sample size was determined to be 280. Stratified random sampling was employed to ensure that the sample adequately represented the population. This approach considers that the numbers of doctors, midwives, and nurses are known and aims to create a sample that evenly represents each of these professional groups within the population. Therefore, the target sample consisted of 95 doctors, 97 nurses, and 88 midwives. The researchers contacted 390 healthcare professionals [157 doctors, 128 nurses, and 105 midwives]. They recruited 310 healthcare professionals [106 doctors, 108 nurses, and 96 midwives] who met the inclusion criteria.

The inclusion criteria were (1) having at least two years of work experience and (2) volunteering. The exclusion criteria were (1) failing to fill out the data collection tools and (2) declining to participate. The research was conducted until the desired number of health professionals from each professional group was successfully recruited into the study.

Data collection tools

Personal and Professional Information Form: The researchers developed the personal and professional information form. It consisted of items on sociodemographic characteristics (gender, age, education, etc.), professional characteristics (occupation, work experience, etc.), and ethics (receiving training in ethics, place of training, encountering ethical issues and solving them, etc.).[3,5,8,11]

Inclination to Ethical Values Scale (IEVS): It was developed by Kaya (2015).[12] The instrument consists of 16 items rated on a five-point Likert-type scale. It has three subscales: love and respect [items 1 to 8], justice and

honesty [items 9 to 13], and cooperation [items 14 to 16]. Higher scores indicate more inclination toward ethical values. The scale has a Cronbach's alpha score of 0.90 (18), which was 0.81 in the present study.

Ethical Attitudes Towards Sexual-Reproductive Health Behaviors and Practices Survey (ESRHS): No measurement assesses ethical attitudes towards sexual-reproductive health. Therefore, the ESRHS was developed by the researchers.[3-5,7-9,13,14] The survey addresses sexual life, family planning, abortion, ARTs, HIV/AIDS, virginity testing, FGM, prenatal diagnosis and screening, cesarean section, and domestic violence against women. It consists of 30 true, false, or controversial statements. The items are responded as "Yes," "No," or "Do not know." The survey has a Cronbach's alpha score of 0.81.

Ethical consideration and procedure

The study was approved by the Social and Human Sciences Ethics Board of Ankara Yıldırım Beyazıt University [Approval no: 9.3.2022-04]. Permission was obtained from the hospital [Approval no: 18.3.2022-10]. The study was conducted according to the ethical principles outlined by the World Medical Association's Declaration of Helsinki.

All healthcare professionals were briefed about the research purpose, procedure, and confidentiality. They were also informed that participation was voluntary and that they could choose not to respond to questions or withdraw from the study at any time without any penalty. Written informed consent was obtained from all participants. Participants filled out the data collection tools themselves to avoid bias.

Data analysis

The data were analyzed using the Statistical Package for Social Sciences (SPSS, IBM version 29, Chicago, IL, USA) at a significance level of 0.05. Frequencies [number (n), percent (%)] were used for categorical variables, while descriptive statistics were used for numerical variables [mean, standard deviation (SD), minimum and maximum values]. Skewness, kurtosis values, histograms, and Q-Q plot graphs were checked to determine whether the data were normally distributed. The results showed that the data were nonnormally distributed. Therefore, the data were analyzed using the Mann-Whitney U test.

Results

Participants' characteristics

The sample consisted of 310 healthcare professionals: doctors (34.2%), nurses (34.8%), and midwives (31%). Participants had a mean age of 33.15 ± 8.70 years (min-max: 23-64). 86.1% of the participants were women.

67.8% of the participants had bachelor's degrees. Participants had 8.88 ± 8.51 years of work experience (min-max: 2-35). 78.4% of the participants had received training in ethics before. 51 % of the participants received in-service training in ethics. 54.5% of the participants stated that they encountered various ethical issues as they worked. 71% of the participants noted that they could solve the ethical issues they encountered (Table 1).

Table 1. The distribution of the health professionals' characteristics (n = 310)

Characteristics	**n (%)**
Occupation	
Doctor	106 (34.2)
Nurse	108 (34.8)
Midwife	96 (31.0)
Age, years (Mean ± SD = 33.15 ± 8.70)	
Gender	
Woman	267 (86.1)
Man	43 (13.9)
Education degree	
High school	3 (1.0)
Bachelor	210 (67.8)
Postgraduate	97 (31.3)
Work experience, years (Mean ± SD = 8.88 ± 8.51)	
Receiving training in ethics	
Yes	243 (78.4)
No	67 (21.6)
Place of ethics training (n=243)	
In undergraduate education	25 (10.2)
In postgraduate education	74 (30.4)
In-service training	124 (51.0)
In course	20 (8.2)
Encountering ethical issues	
Yes	169 (54.5)
No	141 (45.5)
Solving ethical issues (n=169)	
Yes	120 (71.0)
No	49 (29.0)

SD: Standard deviation

The inclination toward ethical values

Participants had a mean IEVS score of 69.56 ± 10.32. They had mean IEVS "love, respect," "justice, honesty," and "cooperation" subscale scores of 35.31±5.28, 21.92±3.59, and 12.36±2.61, respectively (Table 2).

Table 2. Distribution of the IEVS and subscale scores (n = 310)

Scale and subscales [a]	Mean ± SD	Median	Min-Max	Cronbach's alpha
IEVS	69.56 ± 10.32	71	16 – 80	0.81
Love, respect	35.31 ± 5.28	37	8 – 40	0.90
Justice, honesty	21.92 ± 3.59	23	5 – 25	0.93
Cooperation	12.36 ± 2.61	12	3 – 15	0.87

IEVS: The Inclination to Ethical Values Scale, SD: Standard deviation.
[a] Higher scores indicate more inclination toward ethical values.

Ethical attitudes toward sexual-reproductive health behaviors and practices

66.1% of the participants did not believe that it was important for women to have sexual intercourse before marriage. 71.9% of the participants did not believe that it was important for men to have sexual intercourse before marriage. 48.4% of the participants believed that healthcare professionals should recommend family planning methods that they believe are less harmful to couples. 68.7% of the participants did not find it ethical to administer emergency contraception after sexual assault without the consent of the patient. 61.9% of the participants noted that before administering tubal ligation and intrauterine devices to a woman, healthcare professionals should get the permission of her husband. 64.8% of the participants were of the opinion that abortion is wrong. 45.5% of the participants believed that a woman should have the right to undergo an abortion, regardless of the gestational week, in cases of pregnancy resulting from sexual assault. 58.7% of the participants thought that spousal authorization is required for abortion. 35.5% of the participants believed that healthcare professionals should not have the right to refuse to provide abortion services. 50.3% of the participants considered oocyte and sperm donation ethically problematic, even in the absence of financial compensation. Surrogacy was ethical for 44.8% of the participants. 56.1% of the participants noted that healthcare professionals should not respect the decision of an individual who chooses to keep their HIV-positive/AIDS diagnosis from their spouse. 54.5% of the participants regarded surgical sterilization as an ethical measure to protect the infant from the risk of HIV/AIDS when one of the parents was HIV-positive. 75.5% of the participants considered it unethical to perform a virginity test on a woman without her consent, even if requested by a competent court and prosecutor's office. 53.2% of the participants expressed the view that elective cesarean section without a medical reason is unethical (Table 3).

Table 3. The distribution of the statements in Ethical Attitudes Towards Sexual and Reproductive Health Behaviors and Practices Survey (n = 310)

Statements	Yes n (%)	No n (%)	Don't know n (%)
Sexual life			
1. It is important for a woman to be a virgin when she gets married.	64 (20.6)	205 (66.1)	41 (13.2)
2. It is important for a man to gain sexual experience before marriage.	51 (16.5)	223 (71.9)	36 (11.6)
3. Providing information on sexual and reproductive health encourages young people to have sexual intercourse.	25 (8.1)	260 (83.9)	25 (8.1)
Family planning			
4. Counseling on family planning methods should only be provided to married couples.	17 (5.5)	285 (91.9)	8 (2.6)
5. When providing information on family planning methods, healthcare professionals should recommend the method that they believe will cause less harm to the couple.	150 (48.4)	130 (41.9)	30 (9.7)
6. If a couple with an active sex life does not want to have a baby, the man should also take responsibility for family planning.	278 (89.7)	25 (8.1)	7 (2.3)
7. The woman must bear the consequences of an unwanted pregnancy.	4 (1.3)	300 (96.8)	6 (1.9)
8. After sexual assault, the healthcare professional should administer emergency contraception without obtaining consent from the patient.	52 (16.8)	213 (68.7)	45 (14.5)
9. A woman has the right to give birth as well as the right not to give birth.	267	25 (8.1)	18 (5.8)
10. Tubal ligation and intrauterine device insertion depend on the woman's request. However, if she is married, her husband's consent must also be obtained.	192 (61.9)	95 (30.6)	23 (7.4)
Abortion			
11. Abortion is absolutely wrong because the embryo has the right to life after fertilization.	56 (18.1)	201 (64.8)	53 (17.1)
12. In the case of a pregnancy resulting from sexual assault, abortion should be performed at the mother's request, regardless of the gestational week.	141 (45.5)	114 (36.8)	55 (17.7)
13. Since a woman has the right to decide over her own body, her husband's consent is not required for an abortion.	100 (32.3)	182 (58.7)	28 (9.0)
14. Parental consent is required for abortion in adolescent/under-18 pregnancies.	205	62 (20.0)	43 (13.9)
15. Healthcare professionals have the right to refuse to provide abortion services.	153 (49.4)	110 (35.5)	47 (15.2)
Assisted reproductive techniques			
19. Oocyte and sperm donation is ethically unproblematic when it is performed without financial compensation.	78 (25.2)	156 (50.3)	76 (24.5)
16. Frozen sperm cells and embryos must be destroyed after divorce or death of a spouse.	140 (45.2)	98 (31.6)	72 (23.2)
17. Since it is every woman's right to have a child, surrogacy should be used if pregnancy is not possible.	139 (44.8)	99 (31.9)	71 (22.9)
18. Sex can be determined by family request during chromosomal examination of embryos.	90 (29.0)	163 (52.6)	56 (18.1)
HIV/AIDS			
20. HIV-positive individuals should not be allowed to get married.	47 (15.2)	216 (69.7)	47 (15.2)
21. Healthcare professionals should respect the right of HIV-positive individuals to hide their condition from their partner to avoid abandonment by their partner.	86 (27.7)	174 (56.1)	49 (15.8)
22. Couples diagnosed with HIV-positive should undergo surgical sterilization to prevent transmission of HIV to their baby.	169 (54.5)	95 (30.6)	46 (14.8)
23. A pregnant woman diagnosed with HIV-positive should terminate her pregnancy.	27 (8.7)	226 (72.9)	57 (18.4)

Virginity testing			
24. Virginity testing can be performed on a woman at the request of her family members.	32 (10.3)	251 (81.0)	27 (8.7)
25. If a woman does not consent to virginity testing, she may be guilty of misconduct related to chastity or honorable behavior.	22 (7.1)	255 (82.3)	33 (10.6)
26. If there is a competent court and prosecutor's decision, virginity testing should be performed without seeking individual consent.	41 (13.2)	234 (75.5)	35 (11.3)
Female genital mutilation			
27. Since female genital mutilation is a cultural practice, it should be left to the decision of family elders.	11 (3.5)	271 (87.4)	28 (9.0)
Prenatal diagnosis and screening			
28. Invasive diagnostic tests performed during pregnancy such as amniocentesis and chorionic villus biopsy should be performed with the consent of both the pregnant woman and her	239 (77.1)	57 (18.4)	14 (4.5)
Cesarean section			
29. Elective cesarean section based on individual preference should not be performed without a medical reason.	165 (53.2)	121 (39.0)	24 (7.7)
Domestic violence against women			
30. As family matters are private/intimate matters, intervention should not be undertaken unless the person experiencing domestic violence reports it.	52 (16.8)	226 (72.9)	32 (10.3)

The effect of gender on ethical attitudes toward sexual-reproductive health

Male participants attached more importance to virginity before marriage than their women counterparts ($p=0.015$). There were significantly more women than men who believed men should also take responsibility for family planning ($p<0.001$). There were significantly more men than women who believed it was ethical for a woman to bear the consequences of an unwanted pregnancy ($p<0.001$). The number of women who believed women should have the right not to give birth was significantly higher than that of men ($p=0.011$). The number of male participants who regarded abortion as absolutely wrong was significantly higher than that of women participants ($p=0.002$). Compared to women, significantly more men argued that healthcare professionals should have the right to refuse to provide abortion services ($p=0.005$). It was mostly male participants who held the belief that it was ethical to discard frozen sperm cells and embryos following divorce or the death of a spouse ($p=0.026$). Compared to men, significantly more women regarded surgical sterilization as an ethical measure to protect the infant from the risk of HIV/AIDS when one of the parents was HIV-positive ($p=0.032$). Compared to women participants, there were significantly more male participants who viewed it as ethical to perform a virginity test on a woman without her consent, if requested by her family ($p=0.010$). There were more male participants who associated not consenting to a virginity test with dishonorable behavior ($p=0.006$). Significantly more male participants believed it was ethically appropriate to perform a virginity test on a woman without her consent if requested by a competent court and prosecutor's office ($p<0.001$). There were

significantly more men than women who believed that the decision regarding FGM could be entrusted to family elders (p=0.008) (Table 4).

Table 4. The distribution of the statements in Ethical Attitudes Towards Sexual and Reproductive Health Behaviors and Practices Survey by gender (n = 310)

Statements	Gender [a]		Analysis [b]	
	Woman n (%)	Man n (%)	U	p
Sexual life				
1. It is important for a woman to be a virgin when she gets married.	48 (18.0)	16 (37.2)	8.42	0.015*
2. It is important for a man to gain sexual experience before marriage.	42 (15.7)	9 (20.9)	0.871	0.647
3. Providing information on sexual and reproductive health encourages young people to have sexual intercourse.	18 (6.7)	7 (16.3)	4.804	0.091
Family planning				
4. Counseling on family planning methods should only be provided to married couples.	13 (4.9)	4 (9.3)	5.433	0.066
5. When providing information on family planning methods, healthcare professionals should recommend the method that they believe will cause less harm to the couple.	130 (48.7)	20 (46.5)	0.233	0.890
6. If a couple with an active sex life does not want to have a baby, the man should also take responsibility for family planning.	245 (91.8)	33(76.7)	14.049	<0.001**
7. The woman must bear the consequences of an unwanted pregnancy.	2 (0.7)	2 (4.7)	18.963	<0.001**
8. After sexual assault, the healthcare professional should administer emergency contraception without obtaining consent from the patient.	41 (15.4)	11 (25.6)	2.813	0.245
9. A woman has the right to give birth as well as the right not to give birth.	236 (88.4)	31 (72.1)	9.070	0.011*
10. Tubal ligation and intrauterine device insertion depend on the woman's request. However, if she is married, her husband's consent must also be obtained.	163 (61.0)	29 (67.4)	1.373	0.503
Abortion				
11. Abortion is absolutely wrong because the embryo has the right to life after fertilization.	40 (15.0)	16 (37.2)	12.390	0.002*
12. In the case of a pregnancy resulting from sexual assault, abortion should be performed at the mother's request, regardless of the gestational week.	118 (44.2)	23 (53.5)	1.348	0.510
13. Since a woman has the right to decide over her own body, her husband's consent is not required for an abortion.	84 (31.5)	16 (37.2)	2.547	0.280
14. Parental consent is required for abortion in adolescent/under-18 pregnancies.	173 (64.8)	32 (74.4)	2.269	0.322
15. Healthcare professionals have the right to refuse to provide abortion services.	123 (46.1)	30 (69.8)	10.778	0.005*
Assisted reproductive techniques				
16. Oocyte and sperm donation is ethically unproblematic when it is performed without financial compensation.	65 (24.3)	13 (30.2)	1.229	0.541
17. Frozen sperm cells and embryos must be destroyed after divorce or death of a spouse.	113 (42.3)	27 (62.8)	7.262	0.026*
18. Since it is every woman's right to have a child, surrogacy should be used if pregnancy is not possible.	121 (45.3)	18 (41.9)	6.510	0.089
19. Sex can be determined by family request during chromosomal examination of embryos.	77 (28.8)	13 (30.2)	6.709	0.082

HIV/AIDS				
20. HIV-positive individuals should not be allowed to get married.	37 (13.9)	10 (23.3)	2.718	0.257
21. Healthcare professionals should respect the right of HIV-positive individuals to hide their condition from their partner to avoid abandonment by their partner.	75 (28.1)	11 (25.6)	3.846	0.279
22. Couples diagnosed with HIV-positive should undergo surgical sterilization to prevent transmission of HIV to their baby.	153 (57.3)	16 (37.2)	6.914	0.032*
23. A pregnant woman diagnosed with HIV-positive should terminate her pregnancy.	20 (7.5)	7 (16.3)	4.529	0.104
Virginity testing				
24. Virginity testing can be performed on a woman at the request of her family members.	22 (8.2)	10 (23.3)	9.238	0.010*
25. If a woman does not consent to virginity testing, she may be guilty of misconduct related to chastity or honorable behavior.	14 (5.2)	8 (18.6)	10.309	0.006*
26. If there is a competent court and prosecutor's decision, virginity testing should be performed without seeking individual consent.	28 (10.5)	13 (30.2)	13.578	<0.001**
Female genital mutilation				
27. Since female genital mutilation is a cultural practice, it should be left to the decision of family elders.	6 (2.2)	5 (11.6)	9.625	0.008*
Prenatal diagnosis and screening				
28. Invasive diagnostic tests performed during pregnancy such as amniocentesis and chorionic villus biopsy should be performed with the consent of both the pregnant woman and her partner.	208 (77.9)	31 (72.1)	1.007	0.604
Cesarean section				
29. Elective cesarean section based on individual preference should not be performed without a medical reason.	147 (55.1)	18 (41.9)	2.598	0.273
Domestic violence against women				
30. As family matters are private/intimate matters, intervention should not be undertaken unless the person experiencing domestic violence reports it.	44 (16.5)	8 (18.6)	0.657	0.720

[a] n(%) of those who responded "Yes" to the statements. [b] Mann-Whitney U test *p < 0.05 **p < 0.001

Discussion

In recent years, scientific and technological advancements have brought about new developments in the field of reproductive health. However, these progressions have also raised many ethical issues and challenges that demand careful consideration.[15] More than half of our participants faced ethical issues and challenges. Some researchers argue that effective training programs on ethics help health professionals develop the necessary skills to deal with complex ethical issues.[16] Most of our participants reported that they acquired knowledge about ethics and ethical issues through in-service training programs, in courses, in undergraduate, or postgraduate education. However, our findings do not provide information about the quality of ethics education. Research shows that educators find it challenging to provide education on ethics for two reasons.

First, there needs to be more structured curricula and experts. Second, institutions need to allocate more time for that kind of education.[17] Despite all these challenges, educators in obstetrics and gynecology are very much interested in strengthening ethics education.[15]

Inclination towards ethical values is an important factor for ethical decision-making. Our participants reported a high inclination toward love, respect, honesty, justice, and collaboration, which is consistent with the literature.[11,18]

Abortion is a reproductive health practice imbued with ethical dilemmas. Legal regulations have a direct impact on the choices and decisions related to the termination of an unwanted pregnancy. In some countries, abortion is prohibited altogether or is only permitted under limited circumstances (such as to save the woman's life). However, in some other countries, abortion is legal with no restrictions (The World's Abortion Laws).[19] Prohibiting abortion through legislation, even in cases where a woman's life is at risk due to pregnancy complications, is deemed ethically unacceptable.[7] More than half of our participants also believed that abortion was ethically justified.

In countries where abortion is available on demand, such as China, France, the United States, and Türkiye, there are still certain restrictions in place, such as gestational week, spousal or parental authorization, etc.[19] For example, abortion on demand can be performed up to the tenth week of pregnancy in Türkiye. However, abortion can be performed up to the 20th week of pregnancy if there are medical reasons or if the pregnancy is the result of rape.[20] Approximately half of our participants considered it unethical to restrict the number of gestation weeks for abortions performed after rape. Strict legal restrictions on abortion often cause unsafe abortion and maternal mortality.[19,21] Therefore, it is ethically important for women to have more autonomy over abortion. In other aspects, practices that entail the termination of the life of a living being conflict with medical principles related to the preservation and safeguarding of life. This scenario often places healthcare professionals in the midst of ethical dilemmas as they grapple with these conflicting principles and responsibilities. One out of five participants was completely against abortion. Doctors, midwives, and nurses should analyze their thoughts on this issue and understand the impact of their thoughts on the care they provide. Healthcare professionals can refuse to provide abortion services in line with their freedom of thought and ethical attitudes. Half of our participants believed so. However, a healthcare professional who asserts a conscientious objection should promptly refer the pregnant woman to another healthcare provider who is willing to offer the requested service. In emergency situations where the life of the pregnant woman is in jeopardy, it is crucial to prioritize the ethical duty of ensuring the safety and well-being of the pregnant woman.[21]

Spousal or parental consent requirements, which can act as barriers to accessing safe abortion, are at odds with the principle of individual autonomy. However, in some countries, these legal prerequisites are still legally mandated.[7] Three out of five participants found those requirements necessary and justified. Other practices in which women's right to make decisions about their own bodies are legally contingent on obtaining another person's permission include prenatal invasive testing and tubal ligation.[20] More than half of our participants adopted legal regulation in these interventions. Therefore, it is important to make legal regulations ethically appropriate.

Assisted reproductive techniques raise ethical debates. Ensuring that donors provide fully informed and voluntary consent without coercion or exploitation is a critical ethical consideration. The practice of anonymous donation raises questions about the rights and interests of offspring to access their genetic heritage and medical history. The ethical implications of donor selection criteria and rigorous health screening are vital to safeguard the well-being of recipients and potential offspring. The commercialization of oocyte and sperm donation can be viewed as problematic, as it may prioritize profit over ethical and medical considerations. The ethical implications of regulations, or the lack thereof, governing oocyte and sperm donation vary from one jurisdiction to another and can impact the safety and fairness of the process.[5,13,22] For these reasons, donor use is prohibited in some countries, such as Italy and Germany, but legal in others, such as France and Greece.[23] Our participants also had different opinions regarding oocyte and sperm donation. Half of our participants found oocyte and sperm donation unethical, while one out of four participants found it ethical. One out of four participants were undecided.

Cryopreserved embryos can be destroyed upon the request of the spouses, the death of one of the spouses, divorce, or the expiration of a specified period.[7] This raises ethical questions about the right to life of the embryo. Almost half of our participants viewed it as ethical to destroy frozen sperm or embryos after the death of a spouse or divorce. There were significantly more male participants who viewed it as ethical to destroy frozen sperm or embryos after the death of a spouse or divorce. Following the death of a partner due to an unforeseen cause, the woman may still have the opportunity to have a child using a stored embryo, whereas the man does not have the same option. Therefore, gender may be a factor affecting attitudes on this issue.

Assisted reproductive techniques make it possible to determine the sex of embryos (preimplantation genetic diagnosis) during chromosomal examination.[14] However, elective sex selection may lead to gender bias and possible gender ratio imbalances.[24] Therefore, some countries prohibit sex selection, while others allow it only if it is necessary to prevent a serious sex-related hereditary disease.[24] More than half of our participants also objected to the personal use of preimplantation sex selection, which is consistent with the literature.[8]

Surrogacy is a complex and ethically debated practice that raises various concerns. These include the commercial aspect, where payment can be seen as problematic due to the potential commodification of reproductive processes. Additionally, issues such as multiple embryo transfer, which can lead to health risks, fetal reduction, cesarean sections for non-medical reasons, and the question of maternal identity raise ethical dilemmas. Critics of surrogacy argue that it can be unethical because it has the potential to lead to the abuse and exploitation of women, effectively making them service providers for others.[5,22] Three out of ten participants viewed surrogacy as unethical. Tanderup et al. (2015) focused on surrogate mothers in India and reported two important results. First, women's autonomy is neglected when implementing surrogacy procedures. Second, surrogacy raises ethical issues that cannot be resolved through informed consent.[25] Some countries (Ukraine, Greece, etc.) allow surrogacy if certain conditions are met. However, some others (Holland, Finland, etc.) have no legal surrogacy regulation. Some argue that it is important to ban surrogacy to prevent what they perceive as the commodification of the human body, the treatment of children as products, and the sale of children.[5,22]

Elective cesarean sections are an ethically controversial issue. Some argue that cesarean sections should primarily be performed for medical reasons and should not be viewed as an alternative to vaginal delivery.[5] In cases where a pregnant woman requests a cesarean section without medical indication, it is considered best practice for the obstetrician to engage in a thorough discussion with the woman. This discussion should include a recommendation for vaginal delivery, along with an explanation of the associated benefits and risks. It is essential to ensure that the informed consent process is comprehensive and transparent, allowing the pregnant woman to make an informed decision about her mode of delivery. Ultimately, respecting the pregnant woman's autonomy and implementing her choice is fundamental to patient-centered care and medical ethics.[26] Half of our participants believed that elective cesarean sections are ethically justified. However, two out of five participants believed otherwise. The decision to perform cesarean sections should consider both the autonomy and preferences of the pregnant woman as well as the best interests of the fetus. The principle of autonomy does not entail that cesarean sections should be routinely performed, nor does the mere offering of cesarean sections to pregnant women necessarily serve their health interests. Healthcare professionals should adhere to professional integrity and ethical standards to ensure that potential bias, economic gain, or any other personal interests do not influence their interactions with the pregnant woman.[7]

Stigmatized, isolated, and excluded, HIV-positive individuals seek medical assistance less often than their HIV-negative counterparts. Therefore, healthcare professionals should approach HIV-positive individuals without prejudice in a protective and supportive manner. Our participants had positive attitudes towards the marriage of HIV-positive individuals. More than half of our participants were of the opinion that spouses of HIV-positive individuals should be informed about the situation. When a person is diagnosed with HIV, the question of when and how to disclose this information to their partner presents ethical dilemmas.[27] The desire of an HIV-positive

individual to have a child indeed raises significant ethical issues. This is due to the potential risks associated with HIV transmission to both the HIV-negative partner and the baby during pregnancy, childbirth, or breastfeeding.[28] The question of whether a pregnancy should be terminated if the baby is found to be infected with HIV from an HIV-positive mother is a complex and ethically challenging issue. Most of our participants believed that the pregnancy should not be terminated in that case. However, half of our participants found surgical sterilization ethical under those circumstances. The idea that the risk of HIV transmission can be reduced but not eliminated through precautions (elective cesarean sections and avoiding breastfeeding) can significantly influence decisions related to pregnancy and childbirth in the context of an HIV-positive mother.

Negative gender attitudes and patriarchal social structures can indeed put women in a disadvantaged position in various aspects of their lives, including but not limited to sexual-reproductive health. These attitudes and structures can limit women's access to healthcare, particularly in matters related to family planning, pregnancy, childbirth, and sexual health. In patriarchal societies, women may face barriers in seeking healthcare services, making informed choices about their bodies, and exercising control over their reproductive health. These issues make them more vulnerable, which is unethical. Gender can influence attitudes, often reflected in professional attitudes, including those held by healthcare professionals. This is why this study investigated the effect of gender on healthcare professionals' ethical attitudes toward sexual-reproductive health. The findings showed that gender affected our participants' ethical attitudes toward sexual life, family planning, virginity testing, and FGM.

According to sexual ethics, everyone should understand their sexual rights and responsibilities and respect the rights of their partners.[4,6] Our women participants agreed that men can have sex before marriage. However, our male participants believed that it was important whether or not a woman had sex before marriage. This indicates that Turkish healthcare professionals' attitudes toward sexuality do not align with the principles of equal rights and responsibilities in sexual ethics. Such disparities may be attributed to their upbringing in a patriarchal society.

Healthcare professionals providing family planning counseling should offer clear and comprehensive explanations to women about the risks, benefits, and available alternatives. After obtaining informed consent, healthcare professionals must respect women's decisions fully. In addition, it is considered unethical to administer emergency contraception after sexual assault without the informed consent of the survivor. Similarly, requiring marriage as a condition for providing family planning services is ethically problematic.[7] Most of our participants had similar attitudes. However, half of our participants thought it would be ethical to recommend contraceptive methods, which are believed to cause less harm. This has something to do with good intentions. The findings also showed that gender affected our participants' ethical attitudes toward family planning. In other words, they were protective of their sex. For example, there were significantly more women

participants who believed that men should take responsibility for family planning and that women should have the right not to give birth. On the other hand, there were significantly more male participants who believed that women should bear the consequences of unwanted pregnancies.

The findings showed that gender affected our participants' ethical attitudes toward virginity testing, which is scientifically invalid and a violation of human rights, according to the World Health Organization.[4] This is because the presence or absence of an intact hymen is not a reliable or accurate indicator of a person's sexual history.[29] Virginity testing is also contrary to utility, justice, and autonomy principles for the following reasons. First, it has significant biopsychosocial risks, which are exacerbated by sociocultural pressure. The research by Shalhoub-Kevorkian (2005) highlights the potential dangers and ethical concerns associated with mandatory virginity testing, particularly in cases involving sexual abuse. Mandatory virginity testing can exacerbate the physical and psychological harm experienced by victims, potentially increasing the threat to their well-being, including the risk of death.[30] Virginity testing can have significant long-term psychological and emotional effects on individuals, particularly women. These effects may include feelings of shame, stigma, and trauma. The experience of being subjected to such testing can impact an individual's self-esteem and self-worth, which can, in turn, affect their ability to have a healthy and fulfilling sex life in the future. Virginity tests are often conducted for the benefit or satisfaction of others rather than for the well-being or consent of the woman undergoing the test. Therefore, virginity testing is contrary to the principle of utility. It discriminates against women based on their sex, reduces the priority of health, and involves unnecessary conflicts of interest. Therefore, virginity testing is contrary to the principle of justice. Virginity tests deny women's right to privacy. It cannot be assumed that a woman brought for this procedure can make a decision of her own free will. For her, this procedure is physical and sexual violence and may even amount to rape or torture. Therefore, virginity testing, which is detrimental to women's well-being, is contrary to the principle of autonomy and violates the fundamental ethical principle of "first do no harm".[29] The World Health Organization banned virginity testing.[4] Therefore, healthcare professionals should refuse to perform virginity testing for any reason whatsoever. If legal grounds exist, such as an authorized court or prosecutor's decision, the obstetrician/gynecologist may refer the woman to a forensic medicine doctor. Nurses and midwives also must defend women's rights. Most of our participants found virginity testing unethical. However, gender made a significant difference. Women participants had a more ethical stance in their attitude toward virginity testing than their male counterparts. Women participants said they never accepted the validity of reasons such as family requests or authorized court and prosecutor's decisions. A similar situation was also valid for FGM. Women participants, at a higher rate than their male counterparts, believed that practices that directly affect women's bodies are unethical. Despite global efforts to ban FGM and prevent healthcare providers from performing it, three million girls are subjected to it every year. For similar reasons to virginity testing, FGM is harmful and unethical.[2]

Limitations

This study has two limitations. First, the results are sample-specific and cannot be generalized to all healthcare professionals. Second, we could not conduct further analysis because there is not a valid and reliable instrument assessing healthcare professionals' ethical attitudes toward sexual-reproductive health.

In conclusion, healthcare professionals providing sexual-reproductive health services often encounter complex ethical dilemmas and problems. To navigate these challenges, they should be well-versed in the ethical principles and guidelines that govern their practice, including principles of patient autonomy, non-maleficence, and beneficence. One of the reasons why health professionals experience ethical dilemmas is obsolete legal regulations. Therefore, governments should amend laws to be ethically appropriate. National ethical codes and standards should be based on the principles of justice, autonomy, equality, and sexual-reproductive rights. Since gender affects healthcare professionals' ethical attitudes, it is important to develop policies that will develop positive gender roles in society.

Ethical Considerations: The study was approved by the Social and Human Sciences Ethics Board of Ankara Yıldırım Beyazıt University [Approval no: 9.3.2022-04]. Permission was obtained from the hospital [Approval no: 18.3.2022-10].

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