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Araştırma Makalesi/Research Article

## Midwifery Students' Knowledge and Attitudes towards Lesbians and Gay Men

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Ebelik Öğrencilerinin Eşcinsel Bireylere Yönelik Bilgi ve Tutumlarının İncelenmesi

#### Abstract

Objective: This study was aimed at investigating the attitudes and information of midwifery students towars lesbians and gay males. Method: Four hundred and five midwifery students were included into this descriptive study. The demographic information questionnaire, the homosexuality attittudes scale and the information form for homosexuality were used to gather the data. Results: While median age of study participants was 20 (18-31), median the homosexuality attitudes scale and the information form for homosexuality scores were 174 (118-239) and 11 (5-20), respectively. Participants may be suggested to have high negative/homophobic attitudes. There was a statistically significant association between median the homosexuality attittudes scale's score, and students' class years, location where students lived longest and perceived income level (p<0.05). Additionally, a statistically significant association was observed between median the information form for homosexuality's score, and students' family type, perceived income level and parents' educational status (p<0.05). A negative and poor significant correlation was observed between median the homosexuality attittudes scale's score and students' age level, (p<0.05). There was a positive and poor statistically significant correlation was found between median the information form for homosexuality and the homosexuality attitudes scale's scores (p<0.05). In our study, the level of students' knowledge about homosexuals was found to significantly (p<0.05) affect their attitudes. Conclusion: In our study, it was concluded that midwifery students' attitudes towards lesbians and gay males were negative, and information level was insufficient.

Key Words: Attitude, homosexuality, lesbians

### Özet

Amaç: Bu çalışma, ebelik öğrencilerinin lezbiyen ve gey erkeklere yönelik tutum ve bilgilerini incelemeyi amaçlamıştır. Yöntem: Tanımlayıcı türde olan bu çalışmaya 405 ebelik öğrencisi dâhil edilmiştir. Verilerin toplanması için demografik bilgi anketi, Eşcinsellik Tutum Ölçeği (ETÖ) ve Eşcinsellere Yönelik Bilgi Formu (EBT) kullanılmıştır.Bulgular: Çalışmaya katılanların yaş ortalaması 20 (18-31) iken, ETÖ ve EBT puan ortancaları sırasıyla 174 (118-239) ve 11 (5-20)'dir. Katılımcıların yüksek/negatif homofobik tutumları olduğu söylenebilir. ETÖ puan ortancaları ile öğrencilerin sınıfları, en uzun yaşadıkları yer ve algıladıkları gelir düzeyleri arasında istatistiksel olarak anlamlı bir ilişki vardır (p <0.05). Ayrıca, EBT puan ortancaları ile öğrencilerin aile tipi, algılanan gelir düzeyi ve ebeveynlerin eğitim durumu arasında istatistiksel olarak anlamlı bir ilişki gözlenmiştir (p <0.05). ETÖ puan ortancaları ile öğrencilerin yaş düzeyi arasında negatif ve zayıf bir ilişki saptandı (p <0.05). ETÖ ve EBT puan ortancaları arasında pozitif ve zayıf istatistiksel olarak anlamlı bir ilişki bulundu (p <0.05). Çalışmamızda öğrencilerin eşcinseller hakkındaki bilgi düzeylerinin anlamlı düzeyde (p <0,05) tutumlarını etkilediği bulunmuştur.Sonuç: Çalışmamızda ebelik öğrencilerinin lezbiyen ve gey erkeklere yönelik tutumlarının olumsuz olduğu ve bilgi düzeyinin yetersiz olduğu sonucuna varılmıştır.

Anahtar Kelimeler: Tutum, homoseksüellik, lezbiyen

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#### INTRODUCTION

The attitudes against lesbians and gay males in a society are totally based on societal judgement and norms, and individuals' process of socialization (Kilic, 2011). The developed against a certain group in a society by other members are not innate and acquired during the socialization process (Kilic, 2011). Such factors as biases against lesbians and gay males, lack of knowledge, political attitudes, gender differences, religious and cultural effects, paternal structure, dominant masculine role and age have also influences on the attitudes against homosexuality (Gelbal & Duyan, 2006; Herek, 2002; Kilic, 2011; Sarac, 2015).

Although positive changes have globally been observed in the attitudes against homosexual individuals for the last three decades, negative attitudes have been maintained in Turkey, as in most countries, against such individuals (Duyan, Gelbal, & Duyan, 2004). Various changes have been witnessed in societal attitudes and perception towards homosexuality in Turkey; however, lesbians and gay males are still experiencing serious social problems (Erdogan & Koten, 2014). In Turkey, homosexuality is still accepted as a deviant behaviour in general and perceived as a threat distorting social order and obscuring gender roles in society. All these attitudes developing in the other members of the society against homosexuals lead to discrimination due to emotions, such as fear, anxiety, violence, intolerance, biases and hate (Kilic, 2011; Sarac, 2008).

Discrimination experienced by homosexual individuals in a society also leads these individuals to experience considerable inequality in access to and use of health care (Celik & Sahin, 2012; Sahin & Bilgic 2016). However, equality in access to health care is one of the most important and basic human rights. Homosexual individuals reach and utilize health care less due to the fears of being disclosed by nurses, midwives and other health care professionals, and exposure to homophobic attitudes while taking health care. So, homosexual individuals delay their medical treatment or look for medical assistance only in urgent situations (Aaron et al., 2001; Celik & Sahin, 2012; Göregenli, 2006; Sahin & Bilgic, 2016).

When compared to heterosexual individuals, homosexuals exhibit risky behaviours

threatening their health status and experince reproductive and sexual health challenges due to differences in sexual tendencies at a higher rate (Boehmer et al., 2012). Among homosexual individuals, the rates of smoking, use of alcoholic drinks, depression, HIV/AIDS, exposure to physical violence and committing suicide are higher. Therefore, sexual, reproductive and psychological health statuses of homosexual individuals are more likely to be impared due to special health requirements (Boehmer et al., 2012; Celik, 2012).

Midwives actively working in the fields of reproductive, sexual and societal health have important responsibilities and should be aware of mistakes and inequalities in training, national health policies and health care requirements needed by homosexual individuals. Equipment of midwives with second-hand and unscientific knowledge increases negative attitudes and biases towards homosexual individuals, and so may prevent such individuals from access to qualified and sufficient health care. For these reasons, it is essential that the awareness of midwives be increased, and midwives be informed and trained about homosexuality and homosexual individuals during undergraduate education. The present study was aimed at investigating the attitudes and knowledge of midwifery student towars lesbians and gay males.

### **Research Questions**

- 1. What is the knowledge of midwifery students on homosexuality and homosexuals?
- 2. What are the attitudes of midwifery students towards homosexuality and homosexuals?
- 3.Are there any associations between midwifery students' knowledge about homosexuals and midwifery students' sociodemographic features?
- 4. Are there any associations between the socio-demographic features of midwifery students and their attitudes towards homosexuals?
- 5.Are there any associations between midwifery students' knowledge and their attitudes towards homosexuals?

### **METHOD**

### Type of the Study

This study was designed as a descriptive type.

### **Participants and Procedure**

Four hundred and five participants aged between 18 and 31 years old, all of whom were women midwifery students in a university in a Central Anatolian province of Turkey were included into the study. In Turkey, all of the students of midwifery departments are only women students except in one university. There is a man student in this university. Most of the participants (n = 387; 95.6%) were single, and some (56%) were from different urban areas. Of all participants, 81.7% were from nucleus families, while 67.4, 24.7 and 7.9% perceived their income level as medium, good and poor, respectively. In terms of parents' educational status, 69.1% of mothers and 70.9% of fathers were graduated from primary school, and 21% of mothers and 2% of fathers were illeterate, while 9.9% of mothers and 27.2% of fathers were graduated from high schools and higher institutions.

The data in the study were collected before and after lessons using demographic information questionnaire (DIQ), information for homosexuality (IFH) homosexuality attittudes scale (HAS) between March and June 2017 with the students in the midwifery department of a health sciences faculty. The students are exposed to 4-year training in the department and they begin to learn the subjects about women health, sexual health, obstetric in the second year in the midwifery departments in Turkey. Of all participants were the first year (23.5%), second year (25.2%), third year (25.9%) and forth year (25.4%) students. Before the study, the students were asked whether they would like to participate in the study. No questionnaire was given to students who did not want to participate in the study. While all of the second, third and fourth-grade students in the department were included, only two of the first-grade students were excluded out of the study due to wishing not to participate. The students were freed to refuse to participate or withdraw from the study at any time. The students were assured in terms of privacy and given 30-35 min to complete the questionnaire and scales under the supervision of researchers not to be affected by other students' responses.

### Measures

The demographic information questionnaire (DIQ) designed in light of literature (Bilgic et al., 2018; Unlu, Beduk, & Duyan, 2016) by the researchers, the homosexuality attittudes

scale (HAS) and the information form for homosexuality (IFH) was used to gather the data.

The demographic information questionnaire (DIQ): The 8-item questionnaire was used to determine socio-demographic features of students, such as age, marrital status, class year, and location lived longest, family type, perception of economical status and parents' educational status.

The homosexuality attitudes scale (HAS): A quintet Likert-type scale with 56 items HAS was developed and tested in term of the reliability and validity by Dogan et al. in 2008 (Dogan et al., 2008). The scale is scored between one and five: one as 'I strongly agree', two as 'I agree', three as 'I have no idea', four as 'I don't agree' and five as 'I strongly disagree'. The first 28 items in the scale are used to measure the positive attitudes, whereas the remaining 28 items measure the negative attitudes. While the scores in the first 28 questions measuring positive attitudes are retained the same, the questions (2, 5, 6, 8, 10, 12, 14, 16, 17, 18, 20, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 52 and 56) in the second part are reverted with the assumption of negative answers. As the score increases, the attitude becomes negative (Dogan et al., 2008). While the Cronbach's alpha was found as 0.95 in the study carried out by Dogan et al., the value was determined to be 0.82 in our study.

The information form for homosexuality (IFH): IFH developed by Harris, Nightingale and Owens in 1995 was used in order to detect the information level of midwifery students towards homosexuality. In the form, there are 20 items related to homosexuality. The information form items consist of items that measure students' knowledge about homosexuality. Students are expected to answer these items as correct or incorrect. For example: "Homosexuality is a stage in which children grow up" or "Sexual orientation occurs at an early age" etc. The lowest and highest scores in the form changes between 0-20. The higher the scores, the higher the awareness level (Harris, Nightingale, & Owens, 1995; Sarac, 2014). The Turkish version of IFH was performed by Sarac in 2014. In 1995 study by Harris et al., the reliability scores of IFH were found as 0.70 for health care professionals and 0.74 for university students. In the study where the correct answers were assessed as "1" and the wrong answers as "0", the realiability coefficient of the Kuder Richardson 21 (KR-21) was calculated as 0.81 (Sarac, 2014).

### **Ethical Approval**

The protocol for the research project has been approved by a suitably constituted Ethics Committee of the institution within which the work was undertaken and that it conforms to the provisions of the Declaration of Helsinki. Approval was obtained from both Selcuk University Medical Faculty Ethical Board (IRB number = IRB2016/265) and Midwifery Department, Faculty of Health Sciences in which the research was conducted. The students were informed about the purpose and scope of the study both verbally and in written form prior to the study.

### **Data Analysis**

Statistical Package for the Social Sciences for Windows (SPSS, version 20.0, IBM, New York, USA) was used to analyze data. The variables showed no normal distribution. In the univariate analysis of data, numbers, percentage, minimum and maximum values and median were used. The association between independent variables, and the attitudes and knowledge towards lesbians and gay males was analyzed using the bivariate tests, such as the Mann

Whitney U, the Kruskal Wallis, the Spearman correlation and the post-hoc Bonferroni correction. The results were analyzed at 95% confidence interval, and the significance was set at p<0.05.

### **RESULTS**

While median age of study participants was 20 (18-31), median HAS and IFH scores were 174 (118-239) and 11 (5-20), respectively. We observed that as median HAS score increased, negative attitudes towards lesbians and gay males increased (Dogan et al., 2008). For this reason, in this study participants may be suggested to have high negative/homophobic attitudes levels. However, knowledge of study participants was found at middle level (median IFH score = 11), given that the highest score was 20. So, we have found responses of our first and second research questions with these findings.

There was a statistically significant association between median HAS score, and students' class years, location where students lived longest and perceived income level (p<0.05). No statistically significant association was found between median HAS score and marital status, family type, mothers' and fathers' educational status (p>0.05) (Table 1).

**Table 1.** The associations between midwifery students' socio-demographic features and median HAS scores (N= 405)

Demographic characteristics	n	Median (min-max)	z; KW; p
Marital status			
Married	18	168.50 (129-137)	z=-1.920
Single	387	175 (118-239)	p=0.055
Years			
First year	95	185 (141-209)	
Second year	102	185 (141-209)	KW=10.036
Third year*	105	170 (141-218)	p=0.018
Fourth year	103	174 (118-239)	
Location students lived longest			
Rural	178	185 (129-239)	z=- 7.020
Urban	227	168 (118-218)	p<0.001
Family type			-
Nucleus	331	175 (118-239)	z=-0.730
Extended	74	169.50 (147-214)	p=0.465
Perceived income level			•
$Good^*$	100	169 (129-237)	
Medium	273	174 (118-239)	KW=15.319
Poor	32	186 (164-185)	p<0.001
Educational status of mothers			-
Illiterate	85	174 (157-205)	
Primary school	280	173 (118-239)	KW=4.955
High school and over*	40	187 (145-220)	p=0.084
Educational status of fathers			•
Illiterate	8	166.50 (162-194)	KW=2.684
Primary school	287	172 (118-239)	p = 0.261
High school and over	110	177.50 (124-220)	•

N=number, min-max= minimum-maximum, z=Mann Whitney U test, KW=Kruskal Wallis test, p=significance value, HAS=Homosexuality Attitudes Scale. \*Group forming difference.

Additionally, although a statistically significant association was observed between median IFH score, and students' family type, perceived income level and parents' educational status (p<0.05), there was no statistically

significant association between median IFS score, and students' marital status, level of grades and location where students lived longest (p>0.05) (Table 2).

**Table 2.** The associations between midwifery students' socio-demographic features and median IFH scores (N = 405)

Demographic characteristics	N	Median (min-max)	z; KW; p	
Marital status				
Married	18	12 (7-17)	z=-0.655	
Single	387	11 (5-20)	p=0.513	
Years				
First year	95	11 (6-16)		
Second year	102	11 (7-16)	KW=1.898	
Third year*	105	12 (7-16)	p=0.594	
Fourth year	103	11 (5-20)	•	
Location students lived longest				
Rural	178	12 (6-16)	z=-1.220	
Urban	227	11 (5-20)	p=0.223	
Family type			•	
Nucleus	331	11 (5-20)	z=-2.132	
Extended	74	12 (6-15)	p=0.033	
Perceived income level			•	
Good	100	11 (7-20)		
Medium*	273	12 (5-16)	KW=18.31	
Poor	32	11 (6-13)	p<0.001	
Educational status of mothers			•	
Illiterate*	85	11 (6-20)		
Primary school	280	12 (5-17)	KW=14.83	
High school and over	40	10 (9-15)	p=0.001	
Educational status of fathers		•	•	
Illiterate*	8	13 (11-20)		
Primary school	287	12 (5-17)	KW=6.92	
High school and over	110	11 (7-16)	p=0.031	

 $N=number, \ min-max=\ minimum-maximum, \ z=Mann\ Whitney\ U\ test,\ KW=Kruskal\ Wallis\ test,\ p=significance\ value,\ IFH=Information\ Form\ of\ Homosexuality.\ ^*Group\ forming\ difference.$ 

There was a statistically significant association between median HAS score, and students' class years, location where students lived longest and perceived income level (p<0.05). No statistically significant association was found between median HAS score and marital status, family type, mothers' and fathers' educational status (p>0.05) (Table 1).

A negative and poor significant correlation was observed between median HAS score and students' median age, (p<0.05). There

was a positive and poor statistically significant correlation was found between median IFH and HAS scores (p<0.05). And no statistically significant correlation was found between between students' median age and median IFH score (p>0.05) (Table 3). It was determined in our study that the students' knowledge about homosexuals significantly (p<0.05) affected their attitudes (Table 4).

**Table 3.**The relationship between of midwifery students' age level according to has and IFH scores (N = 405)

	IFH	HAS	
Age	$r_{s=}$ -0.006	$r_{s=}$ -0.100	
HAS	p=0. 897 r <sub>s=</sub> 0.167	p=0.043	
IIAS	p=0.001		

P=significance value,  $r_s$ =Spearman's correlation coefficient, HAS=Homosexuality Attitudes Scale, IFH=Information Form of Homosexuality.

**Table 4.** Linear regression model built on HAS and IFH scores

HAS*	Predictors	В	Std. Deviation	Beta	t	p
	Constant IFH	172.070 0.467	4.594 0.396	0.059	37.594 1.179	<b>p&lt;0.001</b> 0.239

<sup>\*</sup>Linear regression

#### **DISCUSSION**

homosexuality Although has been encountered with different attitudes approaches in different cultures over years, the general attitude and approach of Turkish society towards lesbians and gay males still remain negative (Boehmer et al., 2012; Bilgic & Daglar, 2018; Guney et al., 2004; Sah, 2012). Even when societal judgements, including sexuality, have been formed in light of accurate knowledge, societal attittudes are altered too slowly and diffucultly. Moreover, negative attitudes and judgements are also likely to be reinforced through inaccurate knowledge (Sahin & Bilgic, 2016).

Studies performed in Turkey, mostly focus on the attitudes of college students towards homosexuals. The number of studies measuring students' knowledge and enlightening the association between students' socio-demographic features, and the attitudes and knowledge is limited (Bostanci Dastan, 2015; Cirakoglu, 2006; Gelbal & Duyan, 2006; Guney et al., 2004; Sah, 2012; Sakalli & Ugurlu, 2001; Sarac, 2014). There is no study measuring the knowledge of midwifery about homosexaulity and correlation between knowledge and attitudes of midwifery students towards homosexuals in Turkey. As health care professionals in the future, midwives are supposed to serve based on fair, safe, equal and ethical values without distinguishing in terms of race, language, religion, gender and sexual orientation against all individuals in the society, when they start professional life. It is essential that the attitudes of midwives towards lesbians and gay

males deserving qualified health care as with other citizens in Turkey should be positive and sensitized, and midwives' professional formation towards lesbians and gay males should be accurate, precise and scientific-based. In our study performed to investigate midwifery students' attitudes and knowledge towards lesbians and gay males, it was detected that there was a significant association between students' class levels and attitudes, and the attitudes of the first and second class students towards lesbians and gay males were more negative, compared with those at higher classes (Table 1).

In our study, no significant association was detected between students' marital status with attitudes and knowledge (Table 1 and 2). In prior studies, marital status was also found not to affect the attitudes towards homosexuality (Gelbal & Duyan, 2006; Herek & Gonzalez-Rivera, 2006). In our study, while students' life conditions in rural and urban areas had no effect on knowledge, such conditions could be effective on the attitudes towards lesbians and gay males. Between the attitudes of students and living in urban areas or rural were found a statistically significant association (Table 1). In two studies performed in Turkey, the location where study participants lived was found not to affect the attitudes towards lesbians and gay males (Bosntanci Dastan, 2015; Gelbal & Duyan, 2006). The difference between our study findings and those in other studies was considered to arise from the fact that our samples were composed of only women students. Sexuality is one of the factors influencing the attitudes towards homosexuality (Cirakoglu,

2006; Gelbal & Duyan, 2006). However, considering that homosexual individuals choose larger and crowded cities in order to live more comfortably and freely, our study participants' sharing common public realms and level of acquaintance with homosexual individuals can increase. The increase in the level of acquaintance also elevates positive attitudes towards lesbians and gay males, and the case is also supported by previous studies (Anderson, 2002; Gelbal & Duyan, 2006; Guney et al., 2004; Sakalli & Ugurlu, 2001; Sarac, 2015; Sumer, 2015).

While no significant association was found between students' family type and attitudes in our study, there was a significant association between family type and knowledge. The knowledge of students from extended families was found to be slightly higher than those from nucleus families (Table 1 and 2). As a result, it may be suggested that students coming and grown up in extended families are in contact with a greater number of households, and so the possibility of living together with homosexual relatives/friends may increase.

There was a significant association between perceived income level and knowledge and attitudes for homosexuality (Table 1 and 2). The knowledge of students perceiving income level as poor was observed to be lower compared with those with medium to good perceieved income level (Table 2). Unfortunately, we have no detailed knowledge about the socio-economical status of homosexual individuals in Turkey; however, in a study performed in USA, gay males were reported to mostly come from families of middle to higher income level (Barrett & Pollack, 2005). From this point of view, it may be asserted that our study participants from medium to higher income families have higher knowledge as a result of increased level of acquiantance homosexual individuals.

While there was no significant difference between students' maternal and paternal educational status and attitudes, a significant association was detected between maternal and paternal educational status of our study participants, and knowledge. Contrary to the expectations, as maternal and paternal educational level of students increased, students' knowledge decreased (Table 2). Such a finding showed that no training related to lesbians and gay males has been given in the curriculum of Turkish educational system, and so educational system in

Turkey has had no effects on the attitudes towards homosexual individuals. When we scanned the previous studies in Turkey, no studies comparing parents' educational status with students' knowledge towards lesbians and gay males were encountered (Bostanci Dastan, 2015; Gelbal & Duyan, 2006; Sarac, 2014). On the contrary of the findings from our study, Unlu et al. (2016) found a significant relationship between nursing students 'attitudes towards lesbians and gays, and the education level of their parents. The difference between the two studies is thought to have stemmed from the differences in the level of parents' education. While 55.3% of the mothers and 33.2% of the fathers were primary school graduates in the study of Unlu et al. (2016), in our study, 70% of the parents were primary school graduates. The parents in our study had lower levels of education. This may not be changing the attitudes of the students towards homosexuals.

As students' class and ages increased, their attitudes against lesbians and gay males were observed to change slightly, although no change was seen in their knowledge (Table 2 and 3). Students' knowledge related to lesbians and gay males was at middle level (median IFH score = 11). We consider that students' lack of knowledge on lesbians and gay males may have arisen from lack of subjects in the curriculum to increase knowledge of midwifery students during 4-year undergraduate education period. lesbians and gay males are aware that the health care professionals are also deprived of sufficient knowledge in Turkey (Sahin & Bilgic, 2016), as in other countries (Hutchinson, Thompson, & Cederbaum, 2006; Sahin & Bilgic, 2016). Such a condition leads to insecurity in lesbians and gay males against health care professionals, causes difficulties expressing themselves and so affects their access to health care negative (Hutchinson et al., 2006; Sahin & Bilgic, 2016).

In a study performed in Canada, school counsellors were determined to have higher rate of knowledge about homosexuality and so to have positive attitudes towards lesbians and gay males (Alderson, Orzeck, & McEwen, 2009). Considering that individuals' positive attitudes increase as their knowledge regarding lesbians and gay males, we consider that midwives, as an important part of health care, should be equipped with sufficient knowledge for homosexuality and homosexual individuals.

In our study, students' attitudes towards lesbians and gay males were detected to be high negative/homophobic (median HAS score = 174). As consistent with our findings, students in several departments of universities in different regions of Turkey were reported to exhibit negative attitudes towards homosexual individuals (Bilgic & Dalgic, 2018; Cirakoglu, 2006; Guney et al., 2004; Sah, 2012; Sakalli & Ugurlu, 2001; Sarac, 2015; Sumer, 2015; Unlu et al., 2016). In some other studies performed in USA, the attitudes towards lesbians and gay males were determined to be more positive, compared to those in Turkey. In a investigating the attitudes towards homosexuality in USA and performed by Twenge at al. (2016), approximately half of Americans were found to believe that homosexuality is not bad (Twenge, Sherman, & Wells, 2016). As to societal sexual perception/gender role, Turkey shares common features with the countiries in the Mediterranean, Middle East and South America, rather than USA (Bereket & Adam, 2006). The different attitudes in terms of sexual perception in Turkish society from American society are considered to originate from traditional norms in both societies.

Α positive significant but weak relationship was found between the students' knowledge about homosexuals and attitudes towards them. The regression analysis revealed that the knowledge of students significantly affected their attitudes (Table 3 and Table 4). It was an interesting finding that as the knowledge of students increased, their attitudes towards homosexuals became more negative. This indicates that the knowledge won't help increase the positive attitudes towards homosexuals. Turkey has a patriarchal and traditional society (Oksal, 2008). This study was carried out in a province with a highly patriarchal conservative social structure in Central Anatolia. The patriarchal and conservative structure recognizes the heterosexual relationship but denies homosexual behaviors (Erdogan & Koten, 2014; Kilic, 2011). Because students' opinions and attitudes are shaped and affected by the family and the community structure in which they grow up, a change in their attitudes may be difficult even if their knowledge levels increases. In light of all these findings discussed so far, it is thought that the research questions 3, 4, and 5 were answered.

#### Limitations

We consider that our study is significant for leading and guiding to similar future studies to be performed with health care professionals. However, our study also has some limitations. First, our study was performed in a single region of Turkey. Second, the study was carried out with only midwifery students of a health sciences faculty, so our findings cannot be generalized to the whole population of Turkey. Another limitation was that all midwifery students in the study were hypothesized as heterosexual, and were asked no questions about sexual orientation. Sexual orientation of individiuals affects their attitudes towards lesbians and gay males. Based on the limitations in our study, further studies should be extended in a way to include health care professionals in other fields, and the accumulation of data measuring participants' sexual orientation may also shed light on the attitudes and knowledge of participants towards lesbians and gay males.

### **CONCLUSION**

In our study, it was concluded that midwifery students' attitudes towards lesbians and gay males were negative, and knowledge was insufficient. As an important part of health care, midwives should be aware of different sexual orientation and personalities to give sufficient and qualified health care to all individuals in the society. We consider that such awareness can be formed through accurate and sufficient training related to homosexuality during undergraduate education.

Midwives and other health care providers should strive to constitute a hospitable, respectful and safe working condition in favor of all individuals. While caring for the members of the society, midwives and other health care providers should appropriately approach to all individuals, considering that lesbians and gay males could be among the individuals cared for, and that these individuals could have different orientation. Therefore, lesbians and gay males can account for the health problems in a safer and easier way as a result of comfort, acceptance and reliability when hospitalized, and can have access to health care more appropriately. The changes in the attitudes and behaviors of midwives and other health care staff, and the increase of awareness towards lesbians and gay males will be achieved through additional educational efforts related to homosexuality in the curricula during students' undergraduate education.

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## **Conflict of interest**

They were also given no financial support, fund or grants from other institutions.

All authors declare that they have no conflicts of interest.

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