

# DETERMINATION OF HOMOPHOBIA LEVELS OF PHYSICIANS AND EVALUATION OF THE APPROACHES AGAINST LGBTI INDIVIDUALS

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## ABSTRACT

**Aims:** LGBTI is known to be abbreviated from the first letters of "lesbian", "gay", "bisexual", "transgender", "queer" and "intersex". Attitudes towards LGBTI individuals, stereotypes, and false beliefs about them persist. Thus, prejudice and discrimination against LGBTI individuals stand out as an important problem in today's society. LGBTI individuals face discrimination and barriers due to their sexual orientation and gender identity/expression. This study aims to observe physicians' attitudes towards LGBTI individuals, measure their knowledge, determine the level of homophobia among them, and find the factors that affect homophobia, considering the difficulties of LGBTI individuals in the field of health.

**Methods:** The descriptive research was done on the physicians of Marmara University Pendik Research and Application Hospital. Eight sociodemographic and 24 Likert scale questions were asked in the questionnaire. Afterwards, 5 two-choice questions compiled from the "Misconceptions About Sexual Orientations" section of the "LGBT Health for Physicians" published by the Turkish Medical Association were directed to the participants, and a final open-ended question was asked.

**Results:** Sixty percent of the participants were female (n=120) and 40% were male (n=81). The proportion of participants who had acquaintance with LGBTI individuals was 63%. Participants with more familiarity with LGBTI individuals were found to have lower levels of homophobia. There was a statistically significant relationship between homophobia levels and approaches to misconceptions about sexual orientations (p<0.01). Consequentially, in areas where interaction with the patient is more common, levels of homophobia were found to be less than in the areas where interaction with the patient was less.

**Conclusion:** Our results suggest that having incorrect information and no acquaintances from the LGBTI community affects the level of homophobia. To avoid this situation, medical students should be adequately educated about the LGBTI community in order to have a better understanding of patient care.

**Keywords:** Homosexuality, bisexuality, transgender, homophobia, acquaintances

## INTRODUCTION

LGBTI is known to be abbreviated from the first letters of "lesbian", "gay", "bisexual", "transgender", and "intersexual". It is mostly written as LGBTQI+ (lesbian, gay, bisexual, transgender, queer, intersexual, and plus). "Plus" in the abbreviation emphasizes that sexual orientation and gender identity are defined in a spectrum. Furthermore, some individuals see gender as fluid and choose to identify as non-binary individuals.

The term "transgender" identifies that the sex assigned at birth and identification and/or expression of gender might be different (1).

Although it is known that in many societies, LGBTI individuals are perceived as disrespectful and unhealthy compared to individuals defining themselves as heterosexual (2). Yet, sexual orientation and/or gender expression can be tolerated to a certain degree in some societies and/or communities (2).



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Attitudes towards LGBTI individuals, perceived stereotypes, and false beliefs about them persist (2). Thus, prejudice and discrimination against LGBTI individuals stand out as important problems in today's societies (3).

The most common example of prejudice and discrimination against LGBTI individuals are cases of homophobia. Homophobia is generally defined as negative feelings, attitudes, and/or behaviors towards people with different sexual orientations or gender identities (4).

Although the term homophobia is widely used, the term heterosexism and the newer term heteronormativity are being proposed (5).

In a medical context, LGBTI individuals face discrimination and barriers due to their sexual orientation and gender identity/expression, in addition to their health problems. This may create avoidance of healthcare due to discrimination and cause inadequate use of health services, which is an important problem (6). Medical students and physicians must be educated on the rights and needs of LGBTI individuals in health care so that the discriminatory language created by heterosexism and homophobia can be avoided in medical education and health care (7).

Within the capacity of the questionnaires used, this study aims to observe physicians' attitudes toward LGBTI individuals, measure their knowledge, determine the level of homophobia among them, and find the factors that affect homophobia, considering the difficulties of LGBTI individuals in the field of health.

## MATERIAL AND METHODS

### Study Participants

Two hundred and one randomly selected interns and physicians working at Marmara University Pendik Research and Application Hospital participated in the study. The study was planned as a cross-sectional study. Surveys were hand-delivered to participants and collected. Before the survey, a brief explanation was given to the participants about the survey. After the explanation, informed consent was obtained from the participants, and questions asked by the physicians about the research and/or survey were answered appropriately. The survey was planned to be conducted with 200 people with a 95% confidence interval in the sample selection. 201 participants were reached by the removal of 34 participants who left their surveys blank and/or gave invalid answers.

Surveys were conducted after the approval of the Marmara University Local Ethics Committee (protocol code: 09.2018.082, date: 05.01.2018).

### Survey

The survey of the study consisted of 4 parts. The first section contained questions that determined the demographic characteristics of the participants affecting their interactions

with LGBTI individuals. In the second section of the survey, a Turkish adaptation of a 25-point Hudson and Ricketts (8) Homophobia scale with 24 questions developed by Hudson and Ricketts (8) and adapted by Sakalli et al. (9) was used to measure attitudes of survey respondents towards LGBTI individuals. Before applying the scale to the participants, Sakalli et al. (9) removed the question about "being able to walk comfortably in gay parts of the city" because there was no such zone in the city where the scale was applied (Ankara). Since there is no such area in Istanbul, it was also not included in our survey. The original scale reliability was high with a Cronbach alpha score of 0.94 in the Turkish version (9).

The evaluation on the homophobia scale was carried out by questions of the 6-point Likert scale type and the homophobia levels of the individuals were measured according to the median of these values, which were ranked from 1 (I disagree at all) to 6 (I agree very much). Proximity to 1 in an answer indicates decreased homophobia, while proximity to 6 indicates an increase in homophobia. The 15<sup>th</sup>, 16<sup>th</sup>, 18<sup>th</sup>, 20<sup>th</sup>, 21<sup>st</sup>, 23<sup>rd</sup>, 27<sup>th</sup>, 28<sup>th</sup>, 33<sup>rd</sup>, and 34<sup>th</sup> questions in the homophobia questionnaire were collected by reversing. The median value of the total score was obtained. After this, the low and high levels of homophobia categorization, according to the median score, was conducted. The methodology of scale usage has been validated in other studies (4).

In the third section of the survey, the presence of a meaningful relationship between physicians' misconceptions about LGBTI and homophobia levels was investigated by asking the participants for their opinions on statements from 5 articles which we compiled from the "False Beliefs About Sexual Orientations" section of "LGBTI Health for Physicians" published by the Turkish Medical Association (TMA) in 2016 (7). The participants were able to choose between 2 options: "I agree" and "I disagree". According to information from the same article of TMA, participants' answers were classified as right (0 points) and wrong (1 point). A maximum of 5 points obtained indicated the lowest level of knowledge about LGBTI. With this point system, the relationship between participants' homophobia levels and knowledge about LGBTI was evaluated. The overall survey can be seen in Table 1.

### Statistical Analysis

The obtained data were analyzed with IBM SPSS version 21. Chi-squared and independent group t-test was used in the analysis of the findings. The significance level in the tests was set as  $p < 0.05$ . While evaluating the findings, the physicians' branches were categorized into internal medical sciences, surgical medical sciences, and basic medical sciences. Emergency medicine, forensic medicine, family medicine, dermatology, cardiology, neurology, pulmonology, physical medicine and rehabilitation, child and adolescent psychiatry, pediatrics, internal diseases, infectious diseases, psychiatry, and radiology were considered internal medical science. Anatomy, biophysics, medical

**Table 1: The survey used in this study.**

Questions	Answers
1) Gender	
2) Age	
3) Profession	
4) Specialization	
5) Is there someone who is LGBTI among your circle of acquaintances?	Yes/no
6) If yes, how close is this person to you?	Very close/close/a little close/not much close/not close at all
7) Do you have any prior education on health care for LGBTI individuals?	Yes/no
8) If yes, for how long?	
9) Have you ever lived abroad?	Yes/no
10) If yes, for how long and in which country?	
<b>Hudson &amp; Ricketts Homophobia Scale (8)*</b>	
11) I would feel uncomfortable in a homosexual group.	1-6
12) I would be angry if a person of my sex sexually attracted to me.	1-6
13) I would be disappointed if I learned that my son/daughter was homosexual.	1-6
14) I would be disappointed if I learned that my brother/sister was homosexual.	1-6
15) I would enjoy attending social functions at which homosexuals were present.	1-6
16) I would feel comfortable if I learned that my daughter's teacher was lesbian.	1-6
17) I would be bothered if a person of my sex sexually attracted to me.	1-6
18) I would easily speak with homosexuals in a party.	1-6
19) I would feel uncomfortable if I learned that my son's teacher was gay.	1-6
20) It would not bother me if I work with a male homosexual person.	1-6
21) It would not bother me if a person of my sex sexually interested in me.	1-6
22) I would feel that I had failed as a parent, if I learned that my child was homosexual.	1-6
23) I would feel comfortable if I found myself attracted to a person of my sex.	1-6
24) If I saw two man holding hands in public, I would feel disgusted.	1-6
25) It would bother me if I found that my physician was homosexual.	1-6
26) It would bother me if I found that my superior at work was homosexual.	1-6
27) I would feel proud knowing that I was attractive to persons of my sex.	1-6
28) It would not bother me if I work with a female homosexual person.	1-6
29) It would bother me if my partner/spouse was interested in persons of their sex.	1-6
30) I would feel uncomfortable if I found that my neighbor was homosexual.	1-6
31) I would be uncomfortable to be seen in a bar where homosexuals usually go.	1-6
32) I would be bothered if I learned a clergyman of my religion, was homosexual.	1-6
33) I would feel comfortable knowing that my best friend was homosexual.	1-6
34) I would feel comfortable knowing that I am attractive to the persons of my sex.	1-6
<b>Approaches on Misconceptions about Sexual Orientations</b>	
35) Homosexuality is unnatural.	Agree/disagree
36) Homosexuality is a fad. It begins with curiosity; is socially learned and becomes a habit if not intervened promptly.	Agree/disagree
37) Gay and bisexual men are more likely to sexually abuse children.	Agree/disagree
38) Homosexuality is the result of early brain development problems or certain postpartum upbringings.	Agree/disagree
39) AIDS is a gay disease.	Agree/disagree
<b>Case based evaluation</b>	
40) How would be your approach to a transsexual patient of yours? (More than 1 option is possible.)	I would accept/I would not accept/I would be nervous
41) What would be the reasons of your approach? (No enough information, my beliefs, etc.)	

\*Answers to this part of the survey were presented as 6-point Likert scale type ranked from 1 (I disagree at all) to 6 (I agree very much). LGBTI: Lesbian, gay, bisexual, transsexual, intersexual, AIDS: Acquired immunodeficiency syndrome

biochemistry, medical history and ethics, physiology, histology and embryology, medical microbiology, and medical biology were considered basic medical science. Further, pediatric surgery, general surgery, cardiovascular surgery, thoracic surgery, gynecology and obstetrics, otorhinolaryngology, orthopedics and traumatology, urology, and ophthalmology were considered surgical medical science.

Our dependent variables in the study were the physicians' perspectives and approaches to LGBTI individuals. The independent variables that we evaluated were demographic variables such as age and gender, prior education on the topic of health care for LGBTI individuals, having social interactions with an LGBTI individual, and living abroad.

**RESULTS**

Two hundred and one participants completed the survey, of whom 120 (60%) were female, and 81 (40%) were male. There was no statistically significant association between homophobia levels and sex (p=0.069). The mean age of participants was 32 years. The lowest age was 22 and the highest age was 73 years. When we classified the age of the participants as under 32 years old and over 32 years old, no statistically significant association was found between the level of homophobia and the two age groups (p=0.609).

Specialization areas of the participants were classified as internal medical sciences, surgical medical sciences, and basic medical sciences. Most of the participants were from internal medical sciences (n=153, 76%). Others were from surgical medical sciences (n=20, 10%) and basic medical sciences (n=28, 14%). Although no statistically significant association could be found between specialization and homophobia level (p=0.472), homophobia levels were lowest in surgical medical sciences and highest in basic medical sciences (Table 2).

Thirty-seven percent (n=75) of the participants had no acquaintances with LGBTI individuals. A statistically significant association was found between acquaintance and homophobia levels (p=0.036). Further, acquaintance levels with LGBTI individuals were significantly associated with homophobia levels (p=0.013).

Ninety percent (n=181) of the participants had no education about LGBTI health. We found no statistically significant association between education and homophobia level (p=0.833).

Seventy-five percent (n=151) of the participants had lived abroad and 40% (n=19) of them had lived abroad for 4 months or less. No statistically significant association was found between living abroad and homophobia level (p=0.774).

A statistically significant association was found between homophobia level and points achieved in third part of the survey (p<0.01).

Higher homophobia levels were detected on participants who had 5 points (All answers were "I agree") (Table 3).

**Some Sample Questions and Their Analyses According to "Hudson & Ricketts Homophobia Scale"**

**Q13: I would be disappointed if I learned that my son/daughter was homosexual.**

- There was a statistically significant association between gender and frustration when they found out their children was homosexual (p<0.01). Most of the males answered, "agree very strongly" (Figure 1).
- A statistically significant association was found between acquaintances with an LGBTI individual and frustration when they found out their children were homosexual (p<0.01). Participants that have no acquaintances with an LGBTI individual mostly answered "agree very strongly" (Figure 2).

**Table 2: Distribution of the homophobia levels according to specializations.**

Specialization	Homophobia level*	
	Low (%)	High (%)
Surgical medical sciences	60	40
Internal medical sciences	52.9	47.1
Basic medical sciences	42.9	57.1

\* The low and high levels of homophobia categorization was calculated according to the median score.

**Table 3: Distribution of the responses to the "Approaches to Misconceptions about Sexual Orientations" scale.**

Misconceptions about sexual orientations	Agree [%(n)]	Disagree [%(n)]
Homosexuality is unnatural.	18 (36)	82 (165)
Homosexuality is a fad. It begins with curiosity; is socially learned and becomes a habit if not intervened promptly.	16 (32)	84 (169)
Gay and bisexual men are more likely to sexually abuse children.	18 (36)	82 (165)
Homosexuality is the result of early brain development problems or certain upbringings after birth.	26 (52)	74 (149)
AIDS is a gay disease.	5 (10)	95 (191)

AIDS: Acquired immunodeficiency syndrome

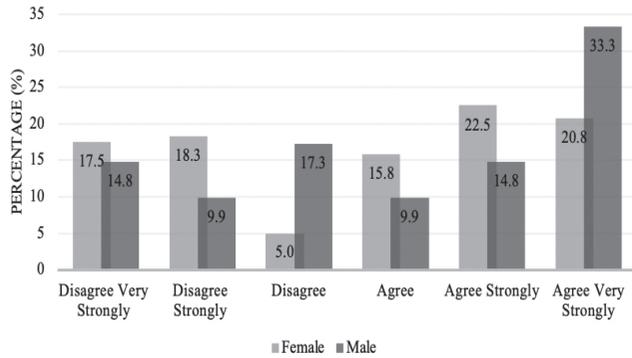


Figure 1: Distribution of the responses to Q13 according to gender.

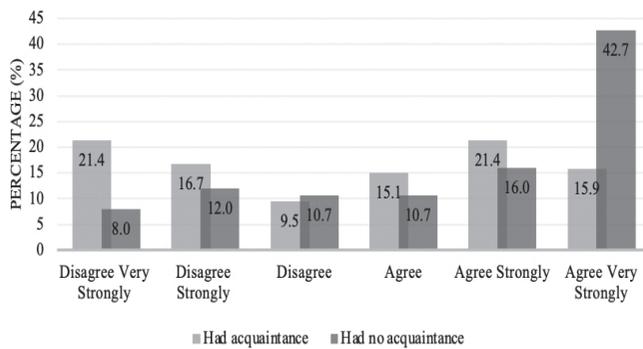


Figure 2: Distribution of the responses to Q13 according to acquaintance.

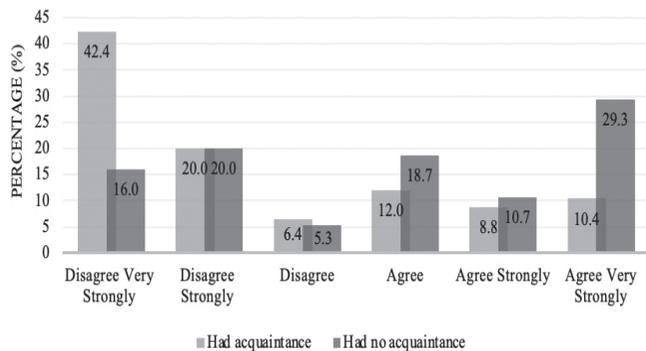


Figure 3: Distribution of the responses to Q19 according to acquaintance.

**Q16: I would feel comfortable if I learned that my daughter's teacher was lesbian.**

- Twenty-four percent (n=49) of the participants answered "agree very strongly". 23.9% (n=48) of the participants answered: "Disagree very strongly".
- There was no statistically significant association between gender and the state of feeling comfortable after learning daughter's teacher was lesbian (p=0.053).
- No statistically significant association was found between having acquaintances with an LGBTI individual and state of

feeling comfortable after learning their daughter's teacher was lesbian (p=0.322).

**Q19: I would feel uncomfortable if I learned that my son's teacher was gay.**

- Seventeen percent (n=35) of the participants answered: "Agree very strongly". 32.3% (n=65) of the participants answered "disagree very strongly".
- There was a statistically significant association between gender and the state of feeling uncomfortable after learning their son's teacher was homosexual (p=0.048). Most of the males answered, "agree very strongly". Also, most of the females answered, "disagree very strongly".
- A statistically significant association was found between having acquaintances with an LGBTI individual and the state of feeling uncomfortable after learning their son's teacher was homosexual (p<0.01) (Figure 3).

**Q22: I would feel that I had failed as a parent, if I learned that my child was homosexual.**

- Forty-three percent (n=86) of the participants answered "disagree very strongly". 8% (n=16) of the participants answered: "Agree very strongly".
- There was no statistically significant association between gender and state of feeling failed as a parent after learning their child was homosexual (p=0.703).
- A statistically significant association was found between having acquaintances with an LGBTI individual and state of feeling failed as a parent after learning their child was homosexual (p=0.01). Most of the participants that had acquaintances answered: "Agree very strongly" (50%, n=100).

**Q25: It would bother me if I found that my physician was homosexual.**

- Sixty-one percent (n=123) of the participants answered: "Disagree very strongly". 5% (n=10) of the participants answered: "Agree very strongly".
- There was no statistically significant association between gender and the state feeling bothered after learning their physician was homosexual (p=0.09).
- No statistically significant association was found between having acquaintances with an LGBTI individual and the state of feeling bothered after learning their physician was homosexual (p=0.205).

**DISCUSSION**

It is known that people's physical health affects their mental well-being and the impact of discrimination is deep and multifaceted. The discrimination they experience can become a part of LGBTI individuals' daily lives, which can cause great losses in their well-being (10, 11).

According to the report of the Organization for Economic Co-operation and Development (OECD), which consists of 35 countries, despite the increasing awareness and acceptance of homosexuality in OECD countries, in recent years, homophobia still maintains its prevalence. While Nordic countries, Western Europe, Spain, Australia, New Zealand, and Canada are above the OECD average in the recognition and acceptance of homosexuality, it is seen that Turkey takes the last place (12).

It is a fact that LGBTI individuals face discrimination and obstacles due to their sexual orientation and gender identity. This decreases their access to health services, causing them to experience increased health problems compared to the rest of society (13).

When looking at our and previous studies' results, we see that for homosexual parameters, males show more extreme results (14-16). In one study by Ratcliff et al. (17), it was found that women were less prejudiced against male homosexuals than men; the same approach has been shown to lesbians, though somewhat less prejudiced. It has been revealed that women show higher internal motivation than men in reacting without prejudices. It has been also understood that gender role variables play a role in the willingness to react without prejudices (17).

In the Sakalli et al. (18) 2002 study, it was observed that male participants used stereotypic attributes more, and unique attributions (counter-stereotypic attributes) less in describing male homosexuals (gays); whilst female participants used fewer stereotypical citations and more specific citations overall (18).

In our study, we found no difference in homophobia levels between genders. This can be due to the national and educational differences between studies.

When we try to understand the different results between specialties, we see that in the 2007 study conducted by Smith and Mathews (19) on 1271 physicians in San Diego, California, the United States of America, the fields of specialization with the lowest homophobia level listed as psychiatry, internal medicine, and pediatrics; whilst the most homophobic specialties were found to be surgery (excluding orthopedics), family health, and orthopedics. In a study conducted by Ramos et al. (20) in New Mexico in 1998, it was observed that gynecology and obstetrics, orthopedics, pathology, and radiology specialties exhibited more negative attitudes towards male and female homosexuals. In addition, it has been determined that gynecology and obstetrics, and orthopedists have been less accepting of male and female homosexuals since the acquired immunodeficiency syndrome epidemic. The specialties with the most positive attitudes towards male and female homosexuals were psychiatry, emergency medicine, family health, and pediatrics. It has been stated that these four specialties can be important resources in providing non-judgmental healthcare to male and female homosexual patients (20).

When we evaluated the specialties one by one (for example, physiology, dermatology, radiology, orthopedics and

traumatology, cardiology, and general surgery), no statistically significant relation between the specialties and the homophobia levels of the physicians was found. However, when the specialties were grouped under 3 main groups as internal, basic, and surgical medical sciences, a statistically significant relation was observed between the branches and the homophobia levels of the physicians. Having less patient interaction, homophobia levels were highest in the basic medical science group. Further, both having more patient contact, homophobia levels in internal medical sciences group were lower and the lowest levels were seen in the surgical medical science group.

We expected to have different results for individuals who had acquaintances with LGBTI individuals and who do not. In the previously mentioned study of Sakalli et al. (9) participants who did not have any social relationships or acquaintances with homosexual people preferred stereotypical references and authentic references less, while those having previous acquaintances preferring specific references and less stereotypical references. Considering both gender and familiarity with LGBTI individuals, the study of Sakalli et al. (9) concluded that male participants and participants without social relations used more negative stereotypes than female participants and participants with social relations, respectively.

In a study conducted by Anderssen (21), in which the attitudes of 511 19-year-old Norwegian young people towards homosexuals and their acquaintances with them throughout 2 years were examined through questionnaires. Two years later, it was seen that there was a negative attitude towards homosexuals at the baseline. The majority (66-79%) had no prior contact with an LGBTI individual. At the end of the study, contact change was found to be positively related to attitude change, although the contact rate only increased by 15-17%. At the same time, it was found that the positively changed behavior pattern made participants more inclined to interact with LGBTI individuals (21).

In our study, a statistically significant relationship was found between acquaintances with LGBTI individuals and the level of homophobia. It was observed that homophobia level was lower in those with LGBTI individuals in their social circle. It was revealed that the level of acquaintances was also an important factor in homophobia. In addition, it was observed that the level of homophobia of people who are very close to LGBTI individuals was lower than those who are not close.

Considering that there are prejudices at the core of all discrimination, education emerges as one of the factors that can affect homophobia. In a study by McNair (22), it was stated that lesbian health should be integrated into the medical education curriculum in Australia. In another study conducted by Khalili et al. (23), 16% of the physicians stated that they had received training to help them master LGBTI health. 52% stated that they had never received any training on LGBTI health, and 80% stated that they wanted to have more information about LGBTI health.

In this study, no statistically significant relationship was found between previous education about health care for LGBTI individuals and the level of homophobia. This may be because the participants who previously did not receive any education about LGBTI were the overwhelming majority.

We looked at the relationship between homophobia levels and living abroad. The effect of not being receptive to new ideas, which is in the formation of all kinds of discrimination, is so important that it cannot be ignored. On the other hand, it is known that being open-minded and liberal often brings respect for human diversity and the ability to accept differences in human nature (24). Living abroad has an undeniable effect on people's worldviews, perceptions, and interpretations of their environment (25). Considering this, it became inevitable to question the effect of living abroad on the level of homophobia in our research. However, no statistically significant relationship was found between living abroad and the level of homophobia.

We also assessed the relationship between believing in misconceptions about sexual orientations and homophobia. In a study by Plugge-Foust and Strickland (26), a statistically significant relationship was found between irrational beliefs and homophobia level. In our study, a statistically significant relationship was found between the knowledge score (formed according to the answers on misconceptions about sexual orientation) and the level of homophobia. It was revealed that the participants who had false beliefs about sexual orientation had higher levels of homophobia. Wrong or incomplete information and not being open to new information and understandings are the basis of discontent, fear, and hatred towards those who are different from oneself (27, 28). Considering this, our results about the level of misconceptions about sexual orientation become even more important.

In our study, no statistically significant result was found between age and homophobia. In a study conducted by Johnson et al. (16), it was observed that homophobia decreased with increasing age. The study further found that the belief that homosexuality is genetically based increased with age (16). In the previously mentioned study by Smith et al. (19), dramatic differences were found in attitudes towards homosexuality among physicians. Responses were arranged according to the year of graduation from medical school. It was found that new graduates displayed more accepting attitudes towards homosexuality than those who had graduated before. Therefore, we can see that the literature is also controversial on this relationship between age and homophobia.

#### Limitations

One of the most important limitations of our study was the open-ended questions, which were not adequately answered by the participants. The last two questions of the questionnaire, "How would be your approach to a transsexual patient of yours? What would be the reasons of your approach?" were one of the

most important questions for our research. Since they were at the end of the questionnaire, we have made them larger and bolder to increase the chances of it catching physicians' attention. We intended to use these questions to gain a better understanding of their approach to patients, to make connections about the effect of homophobia, and to link this approach to many other parts of the research. However, the majority of the physicians skipped those. This could be due to the physicians' lack of time or unwillingness to respond to the questions.

Another limitation of our study was that the study was planned as a single-centered study. This may not be sufficient to generalize the results for all groups of physicians.

#### CONCLUSION

Statistically significant relationship was found between homophobia levels and approaches to misconceptions about sexual orientations. This suggests that having the wrong information affects the level of homophobia. This may affect the access of LGBTI individuals to health resources. In this regard, better training may be given to physicians.

Our study found that the highest homophobia levels were seen in participants in basic medical sciences, followed by internal medical sciences with intermediate homophobia levels, and surgical medical sciences with the lowest levels of homophobia. In that regard, it is thought that the change in the levels of homophobia in these areas may be due to the number of patients contacted and the number of interactions with patients.

Physicians who have not met with LGBTI individuals may have misconceptions about them. However, the level of homophobia can decrease, as they interact with them. This indicates the presence of prejudices in people's minds.

The level of homophobia can be affected by misconceptions in any profession. In the case of physicians, some difficulties can be seen in access to health care for LGBTI individuals, which is one of the most natural human rights. LGBTI individuals regardless of their sexual orientation should be able to take advantage of health care facilities with peace of mind, just like heterosexual individuals. The level of homophobia can easily be affected by people's misconceptions. Therefore, understanding the root of these misconceptions can act as a guide for what can be done in society. In order to avoid homophobia in healthcare, medical students should be adequately educated about the LGBTI community.

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**Informed Consent:** Informed consent was obtained from the participants.

**Conflict of Interest:** The authors declared no conflict of interest.

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