

# Attitude of Medical Students in Paraguay Towards Homosexuality

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## Abstract

**Introduction:** The attitude of medical students towards homosexuality may affect the quality of care for homosexual patients. This study aimed to describe the attitude of medical students at the National University of Asuncion, Paraguay towards homosexuality.

**Methods:** This observational, cross-sectional study was conducted in June 2016 in consecutive medical students from the National University of Asunci6n (Santa Rosa del Aguaray branch), Paraguay. The 10-item attitude towards homosexuality scale (EAH-10) was used to assess participants' acceptance/rejection of homosexuals as individuals, homosexuality as a sexual orientation, and public manifestations of homosexuality.

**Results:** A total of 48 female and 29 male participants (mean age,  $21 \pm 2$  years) were included. Most were Catholic (71.4%), followed by non-Catholic Christian (10.4%), agnostic (9.1%), atheist (2.6%), and other (6.5%). 71.4% reported having at least one homosexual friend. The mean EAH-10 score was  $27.23 \pm 9.379$ . 42.9% of participants were indifferent or undecided in their attitude towards homosexuality and 28.6% were discriminatory. Having homosexual friends was associated with a lower EAH-10 score ( $t = -3.447$  [75],  $p = 0.001$ ).

**Conclusion:** Education about health issues of homosexuals is needed for medical students in Paraguay.

**Key words:** Attitude; Homosexuality; Students, medical

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## Introduction

Homosexuality still suffers from negative stereotypes that influence public perception.<sup>1</sup> There has long been prejudice and discrimination against lesbian, gay, bisexual, and transgender (LGBT) people; even the Old Testament condemns homosexuality.<sup>2</sup> Currently, homosexuality is

not considered a disease although biological, genetic, psychological, and social causes might be involved.<sup>3-5</sup>

In 1973, the American Psychiatric Association removed homosexuality from the Diagnostic and Statistical Manual of Mental Disorders.<sup>6</sup> Currently, homosexuality is considered a healthy expression of sexuality.<sup>7</sup> In 1990, the World Health Organization removed homosexuality from the International Classification of Diseases.<sup>8</sup> Nonetheless, heterosexist ideology influenced by Christianity remains dominant in Western culture.<sup>9</sup>

Homophobia among health professionals may complicate the doctor-patient relationship, therapeutic alliance, and treatment of LGBT people who often avoid routine medical care for fear of being discriminated against or stigmatised.<sup>10,11</sup>

Attitude is defined as the sum of feelings, prejudices, ideas, fears or beliefs that an individual has about a specific issue. Its expression is the opinion of acceptance or rejection by an individual about a particular condition. Attitude may be also considered a set of beliefs, feelings, and tendencies that include three components: cognitive, affective, and behavioural.<sup>12-14</sup>

At the National University of Asuncion, Paraguay, healthcare for the LGBT population is part of the curricula for medical students whose knowledge of LGBT health needs to be improved.<sup>15,16</sup> Negative attitudes of medical students towards LGBT individuals can discourage them from seeking medical attention and to feel badly treated or even discriminated against. It is important to study the

attitude of medical students towards homosexuality because prejudice damages the quality of healthcare for LGBT patients.<sup>17,18</sup> This study aimed to describe the attitude of medical students at the National University of Asunción, Paraguay towards homosexuality.

## Methods

This study was approved by the Socio-anthropology Department of the School of Medical Sciences, National University of Asunción, Paraguay. Informed consent was obtained from each participant; anonymity was guaranteed. This observational, cross-sectional study was conducted in June 2016 in consecutive medical students from the National University of Asunción (Santa Rosa del Aguaray branch), Paraguay. Based on the formula to contrast means bilaterally, a sample size of 54 was needed to achieve a confidence level of 95%, a statistical power of 90%, an accuracy of 5%, and a variance of 64.32.<sup>18</sup>

The 10-item attitude towards homosexuality scale (EAH-10)<sup>19</sup> was used to assess participants' acceptance/rejection of homosexuals as individuals, homosexuality as a sexual orientation, and public manifestations of homosexuality. Scores for each item range from 1 (strongly disagree) to 5 (strongly agree). Total score ranges from 10 to 50. A score below the 27th percentile indicates non-discrimination; percentiles higher than the cut-off indicate a negative attitude (discrimination) towards homosexuality. The EAH-10 has high internal consistency (Cronbach  $\alpha$  = 0.87) and has a two-interrelated-factor structure, with a good fit (goodness-of-fit index = 0.97).<sup>19</sup>

The sociodemographic profile of participants was recorded and included age, sex, academic year,<sup>14</sup> religion (Catholic, non-Catholic Christian, atheist, agnostic, other), and whether they had homosexual friends.

Data were analysed using the Epi Info software 7.2 free version (Centers for Disease Control and Prevention, Atlanta, USA). Student's *t* test and analysis of variance were used to compare the means of variables with normal distribution. Correlation between EAH-10 score and other variables was determined using the Pearson's coefficient.

## Results

A total of 48 female and 29 male participants (mean age,  $21 \pm 2$  years) were included. Those who failed to return a completed questionnaire were excluded. Of the participants, 92.2% were single. Most were in the second year (42.9%) of study, followed by first year (28.6%) and third year (28.6%). Most were from Asunción (59.7%), followed by peripheral cities (28.6%) and Central Province (11.7%). Most were Catholic (71.4%), followed by non-Catholic Christian (10.4%), agnostic (9.1%), atheist (2.6%), and other (6.5%). Most belonged to the middle socioeconomic stratum (79.2%), followed by the lower (18.2%) and higher (2.6%) socioeconomic stratum. 76.6% were regular students. 71.4% reported having at least one homosexual

friend.

The mean EAH-10 score was  $27.23 \pm 9.379$ , with a normal distribution (ZK-S = 0.498,  $p = 0.965$ ). Using the cut-off of 27th and 73rd percentiles of the EAH-10 score (21 and 34 points, respectively), 42.9% of the participants were indifferent or undecided in their attitude towards homosexuality and 28.6% were discriminatory.

Age was not associated with EAH-10 score ( $r = -0.62$ ,  $p = 0.593$ ). Having homosexual friends was associated with a lower EAH-10 score ( $t = -3.447$  [75],  $p = 0.001$ , Table). The effect size was calculated through Hedge's *g* (0.861) and  $R^2$  (0.16).

## Discussion

In our study, most medical students had an indecisive attitude towards homosexuality, and 28.6% had a negative attitude. This percentage is higher than that reported in other studies in Paraguay and Mexico.<sup>16,20</sup> This could be due to the sample characteristics and enrolment procedure (non-probabilistic of consecutive cases). Age was not correlated with EAH-10 score; this is in line with a similar study in Paraguay.<sup>16</sup> There was no significant difference in EAH-10 score between sexes. In contrast, in India and the United States, women have a more positive attitude than men towards homosexuality.<sup>10,21</sup>

Among medical students in Zagreb, Croatia, non-Catholic Christians have been reported to have a higher level of rejection towards homosexuality, whereas Catholics had an intermediate level of rejection and other religions

**Table. Association of medical student characteristics with attitude towards homosexuality scale (EAH-10).**

Variable	Means $\pm$ SD EAH-10 score	p Value
Sex		0.724
Female	$26.94 \pm 8.48$	
Male	$27.72 \pm 10.83$	
Do you have homosexual friends?		0.001
Yes	$25.05 \pm 9.06$	
No	$32.68 \pm 7.96$	
Year		0.125
First	$27.09 \pm 9.61$	
Second	$29.39 \pm 8.12$	
Third	$24.14 \pm 10.39$	
Religion		0.604
Catholic	$27.38 \pm 9.47$	
Non-Catholic Christian	$28.5 \pm 3.62$	
Atheist	$19.5 \pm 13.43$	
Agnostic	$24.43 \pm 8.44$	
Other	$30.6 \pm 14.92$	

had a lower level of rejection.<sup>22</sup> In our study, religion was not associated with EAH-10 score. This may be due to the small sample size.

Having homosexual friends is associated with a lower EAH-10 score and may predict less rejection of homosexuality.<sup>23-25</sup> Having social contact with LGBT people, especially those who are victims of stigma and discrimination, may have a positive effect on attitude towards homosexuality.<sup>23-25</sup>

This study has limitations, including the small sample size, the lack of prior identification of independent variables that could affect attitude towards homosexuality, and the simplistic statistical analysis.

## Conclusion

Education about health issues of LGBT people is needed for medical students. Attitude towards homosexuality is an important issue in medical education. It can affect the quality of care for LGBT patients, the doctor-patient relationship, and the medical assessment of health needs.<sup>26</sup> Health is a fundamental human right.<sup>27</sup>

## Declaration

The authors have no conflicts of interest to disclose.

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