

Knowledge and attitude among medical students of Faculty of Medicine, University of Kelaniya regarding Homosexuality

W.M.K.Chathinthaka, B.S.C.Cooray, L.D.M. Dananjaya, D.H.M.G. Danushka, B.A.I.C. Dassanayaka Group A.2.1





Introduction

- Homosexual individuals are exposed to **substantially more health-related risks** (HIV/AIDS, other communicable diseases, mental health disorders, violence, and suicide) than the general population
- They tend to avoid routine healthcare for fear of stigmatization by the medical professionals, making sexual minorities a section of the population for whom disparities in health are prevalent and problematic
- Considering that homosexuality is still illegal in Sri Lanka and the cultural and religious stigma surrounding the LGBT community, there is a marked deficit in knowledge on sexuality and sexual minorities among medical professionals and medical students.
- As a conservative country where sexuality is a taboo subject, it is important to educate Sri Lankan medical students on these subjects and promote a positive attitude to avoid stigma, so that they can openly and unbiasedly approach patients of different sexual orientations and provide a better health service in future and to be advocates in breaking down social stigma surrounding sexual minorities.
- Identifying the current level of knowledge and attitudes about homosexuality among medical students may pave way to implement necessary amendments in medical curricula in Sri Lanka.

Objectives

To assess the knowledge and attitude among medical students of Faculty of Medicine, University of Kelaniya regarding Homosexuality

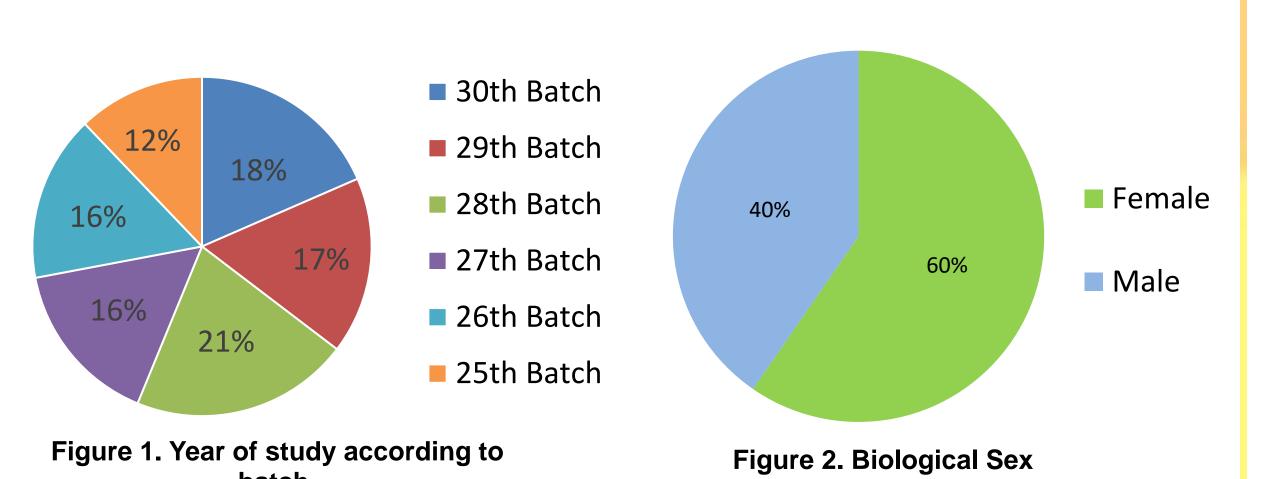
Materials and methods

- Study design—Descriptive cross-sectional study with an analytical component
- Study Setting—Faculty of Medicine, University of Kelaniya
- Study period—December 2019 to February 2020
- Study Population—All medical students currently studying at Faculty of Medicine, University of Kelaniya
- **Sampling**—Probability proportional to size sampling technique was used to calculate number of male and female students selected from each batch. Then students were selected randomly till required sample sizes and proportions were fulfilled.
- Data collection—Three self-administered questionnaires in English was used.
- Questionnaire 1— Demographic information
- Questionnaire 2— "Sex Education and Knowledge about Homosexuality Questionnaire (SEKHQ)" with 32 items to be marked as "true"/ "false"/ "don't know", previously used by a similar Indian study was used to asses the participants knowledge on study subject.
- Questionnaire 3—-"Attitudes towards Homosexuals Questionnaire (AHQ)" with 20 statements to be rated on a 5-grade Likert type scale ranging from 1 ("Strongly disagree) to 5 (Strongly agree), previously used by a similar Indian study was used to asses the attitude of the participants.
- **Data analysis**—Descriptive statistics were used to analyze sociodemographic information and analytical statistics were used to correlate knowledge and attitudes towards homosexuality among medical students to their academic year, sex and religiosity (using SPSS version—25)
- Ethical Considerations—Approval obtained from Ethics Review Committee, Faculty of Medicine, University of Kelaniya; all participants were volunteers.

Results

A total of 423 medical students were approached and invited to participate, out of which 379 (89.6%) consented to participate and returned the filled questionnaires .

The sample was divided in similar proportions among the 6 batches (Fig.1) and had a female preponderance. (Fig.2)



Out of the sample 62 students had LGBT friends(16.4%) and 115 students had encountered LGBT patients (30.34%).

Out of all participant a majority had inadequate knowledge about homosexuality (89%) (Fig.3) However a majority had a positive attitude towards homosexuality (64%) (Fig.4)

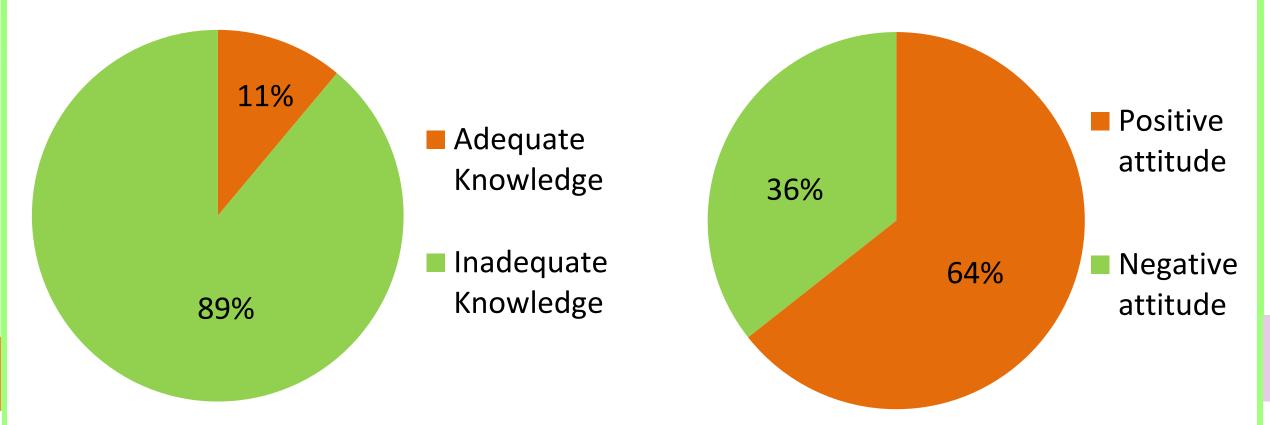


Figure 3. Knowledge about homosexuality

Figure 4. Attitude towards homosexuality

Although both sexes had their mean score on knowledge about homosexuality below adequate, an independent samples t-test indicated that males had significantly higher knowledge (Mean=10.12; SD= 4.55) than females (Mean=8.65; SD= 5.02) (t= -2.887; df=377; p=0.004). However there was no significant difference between male and female students in terms of attitude (t= 0.246; df=377; p= 0.81).

One-way ANOVA test indicated that there was a significant effect of the year of study on student's knowledge [F(5,373) = 5.853; p=0.000]. Pairwise comparisons of means using Tukey's HSD test indicated several significant comparisons. Fourth year students had significantly better knowledge (Mean =11.23) than first years students (Mean=8.66) (p=0.026), second year students (Mean =7.70) (p= 0.001) and fifth year students (Mean =7.97) (p= 0.003). Final year students had significantly better knowledge (Mean=11.0) than second year students (Mean = 7.70) (p= 0.005) and fifth year students (Mean= 7.97) (p= 0.015) (Table 1)

A one-way ANOVA test indicated that the year of study did not have a significant effect on student's attitudes towards homosexuality [F(5,373)=1.79; p=0.113]

Table 1– Mean knowledge and attitude scores for each year of study

Year of study/Batch	Mean knowledge score	Mean attitude score
1 (30 th batch)	8.66 (3.66)	63.51 (11.90)
2 (29 th batch)	7.70 (4.81)	64.09 (11.41)
3 (28 th batch)	9.46 (5.31)	61.44 (6.96)
4 (27 th batch)	11.23(4.65)	62.00 (8.97)
5 (26 th batch)	7.97 (4.76)	65.25 (9.10)
6 (25 th batch)	11.00(5.09)	65.45 (9.34)

A Pearson correlation test indicated a small but significant correlation between knowledge and attitude (r = 0.201; p = 0.00)

Discussion

The key findings of the study are:

- Majority of medical students had inadequate knowledge on homosexuality, but majority of students had a positive attitude towards homosexuality.
- There was a weak positive correlation between knowledge and attitude which was statistically significant
- There was a statistically **significant difference on knowledge** between males and females, with males having the higher level of knowledge, although there was **no statistically significant difference** between their **attitudes**.
- There was a statistically **significant difference** between group means of level of **knowledge** according to **year of study**. However the mean **attitudes** of all years remained positive and did **not differ significantly**.
- The association between religiosity and knowledge and attitude could not be compared due to lack of religious diversity and diversity of religiosity within the study sample.

Limitations— The questionnaire was not validated to a Sri Lankan setting prior to study and the results would have been more generalized with a larger sample including all universities in Sri Lanka.

Conclusion

The study gives a basic insight into the knowledge and attitude among medical students towards homosexuality. It shows that increase in knowledge was correlated with increase of positive attitude.

Although further research is recommended, including medical students of all local universities and with the questionnaire validated to a Sri Lankan setting to have a more comprehensive impression, the study will be of help to recommend necessary amendments in medical curricula in Sri Lanka.

References

- 1. American Psychological Association (2013) *Sexual orientation and homosexuality*. Available at: http://www.apa.org/helpcenter/sexual-orientation.aspx
- 2. Banwari, G. *et al.* (2015) 'Medical students and interns' knowledge about and attitude towards homosexuality', *Journal of Postgraduate Medicine*. doi: 10.4103/0022-3859.153103.
- 3. Dunjić-Kostić, B. et al. (2012) KNOWLEDGE: A POSSIBLE TOOL IN SHAPING MEDICAL PROFESSIONALS' ATTITUDES TOWARDS HOMOSEXUALITY, Psychiatria Danubina
- 4. Harrison, A. E. (1996) 'Primary care of lesbian and gay patients: educating ourselves and our students.', *Family medicine*, 28(1), pp. 10–23. Available at: http://www.ncbi.nlm.nih.gov/pubmed/8720222 (Accessed: 3 July 2019).
- 5. Hollenbach, A. D. et al. (2014) Implementing curricular and institutional climate changes to improve health care for individuals who are LGBT, gender nonconforming, or born with DSD: a resource for medical educators.
- 6. Meyer, Ilan H., Northridge, M. E. (Eds. . (2007) 'The Health of Sexual Minorities', *The Health of Sexual Minorities*. Available at: https://www.springer.com/gp/book/9780387288710.
- 7. Meyer, I. H. (2003) 'Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence.', *Psychological bulletin*. doi: 10.1037/0033-2909.129.5.674.
- 8. Watch, H. R. (2016) "All Five Fingers Are Not the Same": Discrimination on Grounds of Gender Identity and Sexual Orientation in Sri Lanka', https://www.hrw.org/news/2016/08/15/sri-lanka-challenging-gender-norms-brings-abuse.

Acknowledgements

- Our supervisor.
- Department of Public Health, Faculty of Medicine, University of Kelaniya.