

First-year medical students' attitudes towards sexuality

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Summary

The culture in which a person lives, has a strong effect on his sexual orientation and views towards sexuality which creates attitudes towards various sexuality behaviors for self as well as for others. Doctors are the person who has to be non-judgmental towards all aspects and types of sexuality while dealing with health care issues of society. But this is not true in all cases. In India, doctors themselves carry conservative attitudes for various aspects of sexuality, which can be a hurdle in transparent doctor patient therapeutic relationship. But if during the first year itself, the students are assessed for their attitudes, they can be educated for liberalizing their attitudes towards various sexuality. This study aims to assess the attitudes towards sexuality in first year students. We found conservative attitudes for various aspects of sexuality like, homosexuality, commercial sexuality, variations in sexuality.

medical student, sexuality, attitudes

INTRODUCTION

Human sexuality encompasses sex, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy and reproduction. Sexuality is experienced and expressed in thoughts, fantasies, desires, beliefs, attitudes, values, behaviors, practices, roles and relationships. Sexuality is influenced by the interaction of biological, psychological, social, economic, political, cultural, legal, historical, religious and spiritual factors [1]. A person's sexual orientation may influence their sexual interests and attraction to another person [2].

Multiple studies have emphasized sexual health as an important part of general well-

being and quality of life [3-5]. However, in many societies around the world sex and sexuality are still considered shameful and people would rather avoid talking about it. People acquire these attitudes mainly by being exposed to cultural beliefs, norms and behaviors of a culture they grow up in. Thus, even before entering the profession, medical students have already developed some attitudes toward sexuality [6-8].

Sexual orientations other than heterosexuality are still not easily acceptable in India. In India, daughters and sons are carefully prepared for their future domestic roles as mothers and fathers. The culture stresses the differences amongst the two genders. For example, masturbation is generally not easily acceptable among girls. For boys, however, it is considered a preparation for mature sex life. It is acceptable that young boys may masturbate together without shame [9].

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Although doctors in India offer preventive and therapeutic health care which largely includes aspects of sexual health, due to various reasons, sexual health is quite a problematic and often ignored area in health care delivery. For instance, medical students and doctors lack the necessary competence in taking adequate sexual history and providing proper guidance related to sexuality. They may also adopt a negative attitude towards patients or colleagues with different sexual orientations and towards certain sexual behaviors and beliefs [3,5,7,8].

Many studies [3,6,10-14] have shown that negative attitudes towards sexuality can create difficulty in maintaining a comfortable and non-judgmental conversation about other people's sexuality. It may lead to projection of inner emotions, such as shame, disgust, insecurity or embarrassment, on to others. Studies conducted on medical students show that their subjective attitudes towards sexuality have a large effect on their ability to conduct a physical examination, which creates a distance between the doctor and the patient even if it is not directly related to sexual health. Many times the health issues experienced by patients with sexual orientation different than the culturally accepted one (i.e. heterosexual) are ignored and attributed to their sexual behaviors.

At the time of joining a medical course, freshers can be assessed for their attitudes towards sexuality, and necessary help can be provided from the beginning to develop a non-judgmental attitude towards various aspects of sexuality, which can be helpful in dealing with sexual health issues in a much better way. This can be achieved by multiple means and can improve their subsequent skills in sexual health-related areas of medical practice. Thus, this study aims to assess medical students' attitudes towards various aspect of sexuality just when they have entered the medical course.

AIMS AND OBJECTIVES

In a group of first-year medical students, we aimed:

- to study their attitudes towards various aspects of sexuality of self and others and to see whether there were any significant differences.

- to explore gender differences in the students' attitudes towards various aspects sexuality of self and others.

MATERIALS AND METHODS

Study setting and duration

The study was carried out in a medical college in Gujarat, India. This medical college has an intake of 100 students every year. The study was carried out during a single session in August 2014.

Ethical permission was obtained from an institutional ethics committee.

The sample size was 98 students. Of the 100 students, 2 were absent on the day of the study. The students had joined the medical college in the past 3 weeks.

Methodology

The study was explained to the participants in detail and written informed consent was obtained. They then were asked to fill out the Trueblood Sexual Attitudes Questionnaire (TSAQ) [15].

TSAQ was developed to reliably measure attitude changes regarding the most common topics related to sexual behavior. The authors of the questionnaire were also interested in comparing attitudes by gender, ethnicity, sexual experience etc. TSAQ was divided into sexual attitudes acceptable in oneself versus those acceptable in others. TSAQ items were developed based on an analysis of the content of college sexuality course textbooks, with a final scale containing 90 items divided into five subscales: autoeroticism, heterosexuality, homosexuality, sexual variations, and commercial sex. Topics less directly related to sexual behavior were not included. A revised version was designed to shorten the scale, replace underdeveloped items, and to assess test/retest reliability [16].

TSAQ contains 80 items and includes questions regarding attitudes towards self-sexuality (40 items) versus attitudes towards others' sexuality (40 items). Questions are divided into five subscales: masturbation/erotic, heterosexual, homosexual, variations and commercial. Each

item is rated on a 9-point Likert scale, ranging from 1, "completely disagree" to 9, "completely agree". Some questions are reverse scored. Higher scores indicate a more liberal attitude. Questions relating to the five different subscales had been randomly ordered within the self-scale. The same 40 questions had also been randomly ordered within the others' scale. Changes in attitudes toward the self-versus others can be compared. Changes in various areas of sexuality behavior can also be compared.

Alpha coefficient for the entire scale was 0.97: 0.93 for the self-scale and 0.96 for the others' scale. Test-retest reliability after 3 weeks was 0.94 ($P < 0.01$) Test-retest reliability is excellent [15,16].

Data analysis

Data were analyzed using SPSS Version 16. Statistical significance was found by using paired-T test, unpaired-T test and ANOVA (analysis of variance) test. $P < 0.05$ was considered statistically significant.

RESULTS

The study included 98 students, of whom 45 were male and 53 were female. All were 18 years of age.

Table 1. Attitudes towards sexuality

Domains	Self mean (0-9)	Others mean (0-9)
Masturbation/Erotic	3.32	4.22
Heterosexual	4.14	5.01
Homosexual	1.65	3.08
Variations	2.75	3.56
Commercial	3.26	4.23
Average	3.01	4.02

Table 1 shows that students had conservative attitudes towards sexuality behaviors, as mean scores for each domain remained below 5. Attitudes were more liberal for others' sexuality behaviors than for oneself (mean score). The difference between attitudes towards the self and

others' sexuality was found to be statistically significant (paired-T test). The most liberal attitude found was towards heterosexual behaviors in others and the most conservative attitude was for homosexual behavior in the self (mean score).

Table 2. ANOVA test showing differences between the domains in attitudes for self

Domain 1	Domain 2	P
Masturbation/erotic	Heterosexual	0.703
Masturbation/erotic	Homosexual	0.090
Masturbation/erotic	Variations	0.897
Masturbation/erotic	Commercial	1.000
Heterosexual	Homosexual	0.004
Heterosexual	Variations	0.212
Heterosexual	Commercial	0.648
Homosexual	Variations	0.437
Homosexual	Commercial	0.109
Variations	Commercial	0.928

Bold denotes significance.

Table 2 shows that among the attitudes towards aspects of self-sexuality, only the difference between homosexuality and heterosexuality was statistically significant.

Table 3. ANOVA test showing differences between the domains in attitudes for others

Domain 1	Domain 2	P
Masturbation/erotic	Heterosexual	0.327
Masturbation/erotic	Homosexual	0.065
Masturbation/erotic	Variations	0.503
Masturbation/erotic	Commercial	0.503
Heterosexual	Homosexual	0.0001
Heterosexual	Variations	0.010
Heterosexual	Commercial	0.010
Homosexual	Variations	0.777
Homosexual	Commercial	0.777
Variations	Commercial	01.000

Bold denotes significance.

Table 3 shows that among the attitudes towards sexuality aspects in others, the difference between heterosexuality and domains such as homosexuality, variations and commercial was statistically significant.

Table 4. Gender differences in attitudes towards sexuality-self

Domains	Males (N=45) Mean (0-9)	Females (N=53) Mean (0-9)
Masturbation/erotic	4.63	2.29
Heterosexual	5.06	3.24
Homosexual	1.74	1.58
Variations	3.68	2.13
Commercial	4.23	2.43
Average	3.87	2.32

Table 5. Gender differences in attitudes towards sexuality-others

Domains	Males (N=45) Mean (0-9)	Females (N=53) Mean (0-9)
Masturbation/Erotic	5.16	3.35
Heterosexual	5.37	4.29
Homosexual	3.15	3.18
Variations	3.79	3.16
Commercial	5.17	3.40
Average	4.53	3.48

Table 4 and 5 show that male students had more liberal attitudes than female students in both the domains of self and others (mean score) and gender differences are statistically significant in both aspects (unpaired T-test).

DISCUSSION

The study shows that students have more negative attitudes towards others with homosexual behaviors, indulging in commercial sexual activities or using variations in sexual behaviors. On the other hand, masturbation and heterosexual behaviors are little more acceptable. This result is common for all students regardless of their gender. However, male students are more liberal than female students in each domain related to sexual behavior.

Due to such negative attitudes, the students may experience difficulties in dealing with sexual aspects of health, particularly with people of a homosexual orientation, commercial sex workers or people engaging in sexual variations such as multiple relationships, cross-dressing, sadism, masochism, voyeurism.

There are very limited studies available globally as well as regionally that focus on these aspects. From the available limited data [3,16,17], some have shown that medical students in various parts of the world adapt conservative attitudes towards various aspects of sexuality. Attitudes towards homosexual individuals are yet more rigid [3,17]. Some studies have shown that males have more liberal attitudes than females, while some have shown no gender difference in attitudes towards sexuality [3,16].

SUMMARY AND CONCLUSIONS

This study was carried out on 98 first-year medical students who had joined the course in recent past, i.e. 3 weeks before. We aimed to study the attitudes of students towards various aspects of sexuality related to self and others. It can be concluded that:

- students have different attitudes for self and others' sexuality behaviors; they are liberal towards others;
- male students are more liberal than female students in both domains (self and others);
- all students are most conservative towards homosexual behaviors and most liberal towards heterosexual behaviors.

LIMITATIONS

Being a single-center study, regional factors might have had some effect on the result.

FUTURE PERSPECTIVES

Sexual education to change negative attitudes towards sexuality should be taught to medical students.

Studies can be done on a wide distributed sample in different regions to extract more significant data.

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