

# Teaching of sexual medicine and gender issues in medical courses: students' perception

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## SUMMARY

**INTRODUCTION:** In addition to reproductive purposes, human sexuality and sexual health are matters of great importance in the medical office. Despite this, there is still a deficiency in the training of Brazilian medical students regarding sexual medicine and gender issues.

**OBJECTIVE:** The objective of this study was to analyze the perception of fifth- and sixth-year students in relation to the teaching of sexual medicine and gender issues in medical courses.

**METHODS:** This is a descriptive and cross-sectional study with students from the last 2 years of medical schools in the State of Santa Catarina (internship classes), through the application of a self-administered, semi-structured online questionnaire.

**RESULTS:** A total of 164 students answered the questionnaire, with 83.5% (137/164) saying they had taken classes on sexual medicine and 47% (77/164) saying they had taken classes on gender issues. The participants judged the teaching inadequate in most of the topics addressed, and there was no significant difference between students from public and private schools. Notably, 79.9% (131/164) of the students considered the teaching of sexual medicine insufficient or inadequate, while 87.8% (144/164) considered the teaching of gender issues insufficient or inadequate.

**CONCLUSION:** The vast majority of students consider the teaching of sexual medicine and gender issues insufficient and inadequate.

**KEYWORDS:** Sexual health. Sexuality. Sexual and gender minorities. Students. Medical. Personal satisfaction.

## INTRODUCTION

Sexual health was conceptualized in 1975 by the World Health Organization (WHO), which was included in the definition of reproductive health only 20 years later<sup>1</sup>. Beyond reproductive purposes and within the scope of human rights, the understanding of the dimension of human sexuality is fundamental<sup>2</sup>. The importance of this translates into the fact that most gender and sex minorities report of having experienced harassment and discrimination when seeking health services<sup>3</sup>.

In a multi-country survey, it was shown that only 30% of medical schools include sexual health in the curriculum. When they do, the main focus is on reproductive biology and not on the diversity of behaviors and sexual expressions<sup>4</sup>. In Canada and the United States, only 22% of general practitioners regularly ask patients about their sexual health, making clear the gap in medical training<sup>5</sup>.

In a Brazilian study, most students reported that the classes on sexual medicine were insufficient or nonexistent. Issues such as gender identity and expression, as well as sexual orientation are not addressed<sup>6</sup>. A survey with gynecologists, obstetricians, urologists, psychiatrists, and general practitioners showed that

more than half of them do not regularly investigate the sexual health of patients, due to deficient knowledge in sexual health<sup>7</sup>.

Countering the deficiency in medical education, there is an increase in complaints related to sexual dysfunctions among the population<sup>8</sup>. Among females, dysfunction of orgasm and sexual arousal are the most prevalent<sup>9</sup>, and in males, erectile dysfunction is pointed out as predominant<sup>10</sup>.

One strategy to improve sexual health care and care for sex and gender minority populations would be to improve academic training<sup>11</sup>. Assessing the level of satisfaction of medical students at the end of the course can be an instrument for a diagnosis of their training in this area.

This study aimed to analyze the perception of medical internship students regarding the teaching of sexual medicine and gender issues during the medical course.

## METHODS

This is a descriptive, cross-sectional study. The study questionnaire was applied during the first semester of 2022 to students

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in the last 2 years of medical schools in the State of Santa Catarina, Brazil (internship classes).

The final sample size calculation was done using values from the mirror article<sup>11</sup>, which referred to the outcome: “My college’s current curriculum adequately prepared me to comfortably and competently serve sex and gender minorities,” which were applied to OpenEpi at the 95% confidence interval plus 20% to have a margin of safety. A total of 154 questionnaires were then needed in order to have a satisfactory sample of the population.

The project was submitted to the Research Ethics Committee, and the questionnaires were applied after the Consent Opinion was released and approved under number 54431521.4.0000.5369.

Participants were approached by the researchers via electronic means. A link was sent that directed the participant to complete the questionnaire online, through the Google Forms platform. The participants were assured of secrecy and confidentiality. This is a self-administered, semi-structured questionnaire with open and closed questions. The self-answer instrument was applied in a single moment, and only one answer per participant was accepted. The participant could stop filling it out at any time, without being identified or suffering any embarrassment.

The dependent variable of the study was the teaching of sexual medicine and gender issues in medical courses. The independent variables included the types of teaching institution (public or private); subjects that offered these topics; topics covered in the classes; students’ comfort and safety when dealing with sexual medicine and gender issues; and their satisfaction with the teaching of sexual medicine and gender issues.

The data were tabulated using descriptive statistics to obtain frequency distributions, with the use of the Windows Excel software. Later, the data were exported to the SPSS 16.0 program (IBM Corp., Armonk, NY, USA). Qualitative variables were described using absolute and relative frequencies, while quantitative variables were described as means and standard deviations for descriptive analysis. The chi-square ( $\chi^2$ ) or Fisher’s exact test was used to test the homogeneity of proportions. The t-test for independent samples and the Mann-Whitney U test were used to compare parametric and nonparametric variables. The established significance level was  $p < 0.05$ .

The study is based on Resolutions 510/2016 and 466/12 of the National Health Council, which, from the perspective of the individual and collectivities, incorporate bioethical references, such as autonomy, non-maleficence, beneficence, justice, and equity.

Before answering the questionnaire, the participant had to read and agree with the informed consent form. The researchers declare no conflict of interest.

## RESULTS

A total of 164 completed forms were obtained [33 (20.1%) students from public universities and 131 (79.9%) from private universities]. Of the total of 1680 internal students contacted, 9.8% responded to the questionnaire. There was a prevalence of female participants (68.3%).

When asked about the teaching of sexual medicine, 83.5% (137/164) stated that they had been taught about this subject. There was no difference between the types of school (PR 1.02; 95%CI 0.87–1.20;  $p=0.820$ ). As for gender issues, 47% (77/164) stated that this subject was addressed during medical school, and there was no difference between types of school (PR 1.12; 95%CI 0.77–1.64;  $p=0.557$ ).

Table 1 shows which course subjects addressed the themes of this study. Gynecology, urology, and psychiatry stood out, and bioethics was the discipline that least addressed the theme. Gender issues were less addressed in all disciplines.

Table 2 shows that, in most of the topics covered in the questionnaire, the participants judged the teaching to be inadequate, in both private and public schools, and there are no differences between the types of school and the various specific topics.

When asked about patient care, they answered to feel comfort and security to attend: sexual minorities in 100/164 (61%); gender minorities, 63/164 (38.4%); cases of sexual dysfunctions, 75/164 (45.7%); questions of sexual practices with patients of minorities of sex or gender, 34/164 (20.7%); and questions of gender identity, 34/164 (20.7%).

As for the opportunities to attend cases involving sexual and gender minorities, 63% (104/164) of the students stated that they were insufficient or non-existent during the course.

**Table 1.** Distribution of the teaching of sexual medicine and gender issues according to disciplines.

	Sexual medicine n (%)	Gender issues n (%)
Gynecology	127 (77.4)	54 (32.9)
Urology	84 (51.2)	3 (1.8)
Infectology	9 (5.5)	2 (1.2)
Internal medicine	13 (7.9)	5 (3)
Psychiatry	25 (15.2)	18 (11)
Geriatrics	6 (3.7)	1 (0.6)
Endocrinology	17 (10.4)	10 (6.1)
Medical psychology	7 (4.3)	6 (3.7)
Bioethics	2 (1.2)	3 (1.8)
Public health	12 (7.3)	8 (4.9)
Other	5 (3)	8 (4.9)
Not addressed	25 (15.2)	87 (53)

**Table 2.** Comparison between public (n=33) and private (n=131) medical schools regarding perceived adequate teaching of sexual medicine topics and gender issues (total n=164).

Topic	Full n (%)	Public n (%)	Private n (%)	RP	95%CI	p
Sexual response cycle	69 (42.1)	15 (45.5)	54 (41.2)	1.103	0.55–1.69	0.660
STI prevention	154 (93.9)	32 (97.0)	122 (93.9)	1.041	0.96–1.12	0.410
Sexuality in special situations	47 (28.7)	11 (33.3)	36 (27.5)	1.213	0.69–2.12	0.506
Abortion	99 (60.4)	21 (63.6)	78 (59.5)	1.069	0.80–1.43	0.667
Sexual violence	86 (52.4)	18 (54.5)	68 (51.4)	1.051	0.74–1.49	0.786
Sexual and reproductive rights	52 (31.7)	7 (21.2)	45 (34.4)	0.618	0.31–1.24	0.147
Gender incongruence	27 (16.5)	6 (18.2)	21 (16.0)	1.134	0.50–0.82	0.766
Sexual orientation	28 (17.1)	8 (24.2)	20 (15.3)	1.588	0.77–3.28	0.221
Sexual dysfunction	91 (55.5)	20 (60.6)	71 (54.6)	1.101	0.80–1.51	0.565
Intersexuality	12 (7.3)	3 (9.1)	9 (6.9)	1.323	0.38–4.62	0.662
Effect of medications on sexuality	42 (25.6)	7 (21.2)	35 (26.7)	0.794	0.39–1.32	0.517
Effect of diseases on sexual response	31 (18.9)	4 (12.1)	27 (20.6)	0.588	0.22–1.56	0.266

PR: prevalence ratio; CI: confidence interval; STI: sexually transmitted infections.

In general, 79.9% (131/164) of students considered the teaching of sexual medicine insufficient or inadequate in their schools, while 87.8% (144/164) evaluated the teaching of gender issues insufficient or inadequate.

## DISCUSSION

In 2014, the National Curriculum Guidelines (DCN) instituted the inclusion of gender and sexuality themes in medical curricula, explaining the need and importance of the approach of both<sup>12</sup>. Despite this, 8 years after the implementation of these guidelines, our study showed that there is still a lack in the teaching of these themes in the medical courses of SC, both public and private. This finding comes to add to similar studies carried out in other regions of Brazil<sup>6,7</sup> and in Europe<sup>11-14</sup>.

When asked about the teaching of sexual medicine, 83.5% (137/164) said they had taken classes on this subject, and similar numbers were found in the study of Rufino et al. (95.2%)<sup>7</sup>. However, when it comes to gender issues, only 47% of students reported having taken classes on the subject. This disparity between the themes is in line with what was observed in the study by Zelin et al., where 92.7% of the participants felt comfortable treating sex minority patients, but only 31.7% felt comfortable serving gender minorities<sup>11</sup>.

Analyzing the medical curricula of Brazil, we noticed that it is more focused on sexual medicine, leaving gender in the background<sup>7,15,16</sup>. Sexuality is considered to have a greater relationship with the physical body and stigmas of diseases that can be acquired by expressing it<sup>16</sup>, leading to a “selective visibility”

for the health care of this population with a focus on the genital organs, reproduction, and sexually transmitted infections (STIs), disregarding the complexity and subjectivity of these individuals<sup>16</sup>, and perpetuating the cisnormative and binary pattern of the Brazilian health system, where minorities of sex and gender still suffer from the lack of competence, negligence, and frequent denial of their health rights<sup>17</sup>.

According to the interviewees, the subjects that most addressed the theme of sexual medicine were gynecology (77.4%), urology (51.2%), and psychiatry (15.2%), while gender issues were most addressed only in gynecology (32.9%). Similar results were found in other studies<sup>6,7,14</sup>, reiterating a punctual approach to these themes, focusing on reproductive and pathological themes or on “risk behaviors” related to these groups, such as cancer, abortion, psychiatric diseases, and STIs<sup>7,15</sup>.

Reinforcing the aforementioned findings, the themes evaluated as having the most appropriate education were the prevention of STIs, abortion, sexual dysfunctions, sexual violence, and sexual response cycle, whereas the most inadequate were intersexuality, effect of acute and chronic diseases on sexual response, and gender incongruity. There was no statistical significance ( $p < 0.05$ ) among students from public and private schools. Similar findings were found in the study by Rufino et al<sup>7</sup>.

Due to this reality, it is common for people who fit into minorities of gender and sex and/or with sexual issues in their broadest significance, to stop seeking medical care for fear of being treated badly, suffering discrimination and homophobia<sup>3</sup>. This leads to a greater risk of developing diseases and a consequent delay in diagnoses and initiation of treatments<sup>18</sup>.

This contrast between the low teaching and approach of medical schools with a high practical demand for such professional skills makes us critically rethink the medical curricula not only in SC and Brazil but also in most medical schools around the world.

## CONCLUSION

The findings presented here reinforce the lack in the teaching of sexual medicine and gender issues in the medical courses of Santa Catarina. The vast majority of students consider the teaching of sexual medicine and gender issues insufficient and inadequate.

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It was observed that, throughout the course, several topics were addressed in a timely manner, usually focusing on biological and pathological aspects and avoiding themes such as intersexuality.

The results indicate that medical schools should reassess the format of the teaching of sexual medicine and gender issues.

## AUTHORS' CONTRIBUTIONS

**ATJ:** Conceptualization, Methodology, Project administration, Supervision, Writing – review & editing. **MSG:** Conceptualization, Data curation, Formal Analysis, Investigation, Writing – review & editing. **MMN:** Data curation, Formal Analysis, Investigation, Writing – review & editing.

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