



ORIGINAL ARTICLE

TEACHING SEXUALLY TRANSMITTED INFECTIONS TO UNDERGRADUATE NURSING STUDENTS IN BRAZIL*

HIGHLIGHTS

1. The teaching of sexually transmitted infections occurs programmatically.
2. It occurs mainly focusing on HIV/AIDS and syphilis.
3. There are associations between education and public policies.
4. Teachers have autonomy in how teaching is offered.

Stéfany Petry¹ 
Maria Itayra Padilha¹ 

ABSTRACT

Objective: To identify the approach to Sexually Transmitted Infections within Undergraduate Nursing Courses at Federal Universities in Brazil from 1972 to 2023. **Method:** Qualitative, historical, and social study, using oral and documentary sources. Interviews were conducted with 23 professors from five undergraduate nursing courses in Brazil. For data analysis, the software [Atlas.ti](#) version 9.0 and also Content Analysis were used. **Results:** Three categories were listed: "Strategies and actions carried out in the teaching of Sexually Transmitted Infections", "Articulation of teaching with public policies" and "Acting as a teacher on the subject". **Conclusion:** Teaching involves health education, nursing consultation, diagnosis, and treatment in practical and theoretical classes, emphasizing women's and adult health subjects. Teachers have autonomy in how teaching is offered to students in terms of content, strategies, and the use of public policies.

KEYWORDS: Teachers; Undergraduate Nursing Programs; Teaching; Sexually Transmitted Infections; Nursing Education.

HOW TO REFERENCE THIS ARTICLE:

Petry S, Padilha MI. Teaching Sexually Transmitted Infections to undergraduate nursing students in Brazil. *Cogitare Enferm.* [Internet]. 2024 [cited "insert year, month and day"]; 29. Available from: <https://doi.org/10.1590/ce.v29i0.96747>.

INTRODUCTION

The curricula of undergraduate nursing courses vary according to the country, the educational institution, and the level of training. Currently, education in Brazil is guided by the National Curriculum Guidelines for Undergraduate Nursing Courses (DCN-ENF), which do not specify programmatic content that should be covered in the subjects of a curriculum but highlight the need to train a professional capable of intervening in the health-disease process, epidemiologically significant in the region of operation and at the national level¹.

Regarding the content and teaching of Sexually Transmitted Infections (STIs), it is possible to show a strong connection with the subject called "Nursing in Communicable Diseases," which was part of the Minimum Curriculum of the Undergraduate Nursing Course according to Resolution No. 04/72 of the Federal Council of Education². As a historical cut of this study, we chose 1972 due to the above resolution, introducing the discipline and its trajectory in the curricula up to the present.

With the evolution of nursing education in curriculum reformulations, the subject was incorporated into other courses or, in some institutions, continued to be listed as a specific subject³⁻⁴. Although the concept of sexual health was defined in 1975 by the World Health Organization (WHO), there are inconsistencies in the educational content about sexual health for health students worldwide, with gaps in teaching that can affect clinical skills⁵. In Spain, this content within nursing curricula is basic and limited, focusing on reproductive health and underdeveloped sexual health⁶. Except in South Africa, there are no curricula aimed at training health students in the area of sexual health throughout Sub-Saharan Africa⁷.

A health curriculum adapted for a country or region necessarily needs to know its epidemiological profile and the incidences and prevalences of health issues related to sexual health and to conduct an investigation to identify the most common concerns about individuals' sexual health⁸. The theme is of interest to global public health, potentially affecting all gender identities, regardless of age, and reflecting serious problems in sexual and reproductive health. Furthermore, the emergence of new infections that can be acquired through sexual contact and the resurgence of neglected STIs emerge as a growing challenge in providing adequate prevention and control services⁹.

To address STIs, it is necessary to carry out nursing actions to interrupt the transmission chain, with early detection of cases, treatment of infected individuals and their partners, and prevention of other STIs and complications. The role of nursing is essential in terms of health education, case identification, reporting, nursing consultations in STIs among various clients, counseling, treatment, and adherence, among others¹⁰⁻¹². Given the magnitude of activities and actions that nursing must and can develop in this area, the guiding question arises "how is the teaching of Sexually Transmitted Infections conducted in Nursing Undergraduate Courses at Federal Universities in Brazil?" The goal is to identify the approach to Sexually Transmitted Infections within Undergraduate Nursing Courses at Federal Universities in Brazil from 1972 to 2023.

METHOD

Qualitative, historical, and social study, using oral and documentary sources. Conducted in five undergraduate nursing courses at Federal Universities in Brazil. A search

was conducted on the e-MEC Portal and the longest-running course from each Brazilian region was selected: South - Universidade Federal do Rio Grande do Sul (UFRGS) (1950); Southeast - Universidade Federal do Rio de Janeiro (UFRJ) (1923); Midwest - Universidade Federal de Mato Grosso (UFMT) (1975); Northeast - Universidade Federal da Bahia (UFBA) (1947); and North - Universidade Federal do Amazonas (UFAM) (1951).

To compose the oral sources, the teaching staff was identified on the institutional pages of the undergraduate courses, and later, a search was conducted in the Lattes curricula. Initially, invitations were sent via electronic mail (e-mail) to faculty members with research lines and productions in the area of infectious diseases, STIs, sexuality, and sexual health. Subsequently, due to low participation, it was decided to send invitations to the entire faculty of the institutions and request recommendations as the interviews took place. The research sampling was initially characterized as intentional, followed by snowball¹³. The data collection phase was completed as soon as theoretical saturation about the phenomenon was reached, that is, there were no more insights significant about the phenomenon studied.

The inclusion criteria were participants in leadership/coordination positions of undergraduate nursing courses and teachers involved in STI education. As an exclusion criterion, teachers involved in teaching sexual health and sexuality without addressing STIs in their content and teachers of basic cycle subjects were excluded. To ensure the study's methodological rigor, the criteria of the *Consolidated Criteria for Reporting Qualitative Research* (COREQ) were adopted¹⁴.

The interviews took place according to the availability of the participants, guided by a semi-structured script, from March to October 2022, in a virtual environment (*Google Meet*), with an average duration of 52 minutes. Four faculty members in coordination/management positions and 19 faculty members involved in teaching the subject within courses participated. The interviews were transcribed by the main author and sent in their entirety for validation by the participants.

The data analysis stage consisted of coding and organization in the Atlas.ti software version 9.0, and was based on Content Analysis¹⁵. Using the software, inserting codes, group codes, and preparing memos that assisted in the analysis process was possible. The code groups made it possible to list three categories of analysis: "Strategies and actions carried out in the teaching of Sexually Transmitted Infections", "Articulation of teaching with public policies" and "Acting as a teacher on the subject". The documentary sources of the study were the current Pedagogical Projects of the courses, curricular grids, teaching and lesson plans of the subjects available in full on the institutional pages, online, and also provided by the teachers.

The Ethics and Research Committee approved the study under opinion No. 5.121.940. To identify the participants, anonymity was chosen through the use of codes (E1, E2, E3, respectively), inserted according to the chronological order in which the interviews took place, followed by the acronym of the teacher's institution. The Free and Informed Consent Form (TCLE) was sent virtually to the participants, filled out, and authorized through *Google Forms*[®], with a copy filed with the researcher.

RESULTS

Of the 23 teachers, 18 (78.26%) were female and five (21.74%) were male. The age ranged from 31 to 68 years, with an average of 50.91 years. The average length of service

in the institutions was 20.96 years, ranging from three to 44 years of teaching. Seven (30.43%) did not complete their nursing degree at the institution where they worked as faculty. The participation, according to the institution, was six (26.09%) professors from UFRJ, five (21.74%) from UFBA, five (21.74%) from UFRGS, four (17.39%) from UFMT, and three (13.04%) from UFAM. Identifying nine specialties/areas of expertise and knowledge of the teachers working in the subjects was possible, emphasizing women's health (n=8) and adult health (n=6).

Strategies and actions carried out in the teaching of Sexually Transmitted Infections

With the progress of science and public health policies, the aspects addressed in relation to STIs and the actions developed in education have been changing. The changes that have occurred regarding environments for assisting people and the topics covered are perceived through the teachers' speeches.

In prenatal care, we needed to address issues related to all STIs, including HIV/AIDS. It was time to do the tests to give results, and at that time, we carried out educational activities with women in the field. We had another area of gynecology, another field of practice that was when the preventive was done, all these things. We were always also reporting this to women in the puerperal pregnancy cycle, associating it with the risk of vertical transmission of AIDS, syphilis, and other STIs. (E2UFBA)

I called a former student who had been in HIV/AIDS for over 20 years and we worked separately on two things: STIs through the syndromic approach and HIV/AIDS we brought not only the professional's perspective, but we always brought people living with HIV to bring their context of experience, of illness. (E15UFMT)

The articulation of nursing was perceived in all aspects inherent to teaching STIs, addressing important health education issues, counseling, nursing consultation, diagnosis, and treatment in various internship fields and theoretical classes. Teachers evidence participation in the nursing consultation and procedures as intrinsic to the student's learning. Teachers use various approaches, not being restricted to traditional classroom teaching, making the teaching and learning process more dynamic.

We have the practice in the laboratory, which we take advantage of to demonstrate the techniques to guide how this practice will be in the service, including the educational activities that they already started performing in the service, because they have already had the theoretical content. (E6UFBA)

We work in an expository way, we work in the form of case studies, and we work a lot on the issue of training the flowcharts, how to apply the flowcharts, and recognizing the syndromes. [...] When I go to the fields, to the consultations, we work very closely with what we see in the consultations, the detections, for example, of condylomatous, typical pathological leukorrhea, always with this focus on the syndromic approach. (E7UFRJ)

We provide materials for students to always read before classes and work with case studies and workshops. We encourage academics to position themselves as professionals in primary health care services and think about their role in decision-making from a clinical, epidemiological, social, ethical, educational, and nursing competencies perspective. Then, we go to the internship field in primary care; we take on the assistance, and I take on a schedule of nursing consultations. (E11UFRGS)

[...] I work with the concept map issue, where they work on hepatitis, then I provide the theorization. We play a board game to see the apprehension of the content and what they have assimilated for the moment of content synthesis. (E16UFMT)

The teaching plans and lesson plans of some of the interviewed teachers were available, so it was possible, beyond the notes, to highlight the educational activity focused on STIs programmatically in the subjects, according to Table 1.

Table 1 - Sexually Transmitted Infections in the teaching plans. Florianópolis, SC, Brazil, 2023

Institution	Discipline	Programmatic Content
UFAM	Nursing in Communicable Diseases	<ol style="list-style-type: none"> 1. Systematization of Nursing Care (SNC) in diseases that cause genital ulcers: Syphilis, Soft Chancre, Lymphogranuloma Venereum (LGV), Donovanosis, Herpes Simplex, Condyloma Acuminatum. 2. SNC in diseases that cause urethral/vaginal discharge: Gonorrhea, Non-Gonococcal Urethritis. 3. SNC in diseases that cause vaginal discharge: Candidiasis, Trichomoniasis, and Vaginosis. 4. SNC to the Carrier or Susceptible to HIV/AIDS and Opportunistic Diseases: Tuberculosis; Hepatitis; Toxoplasmosis.
UFBA	Nursing in Women's Health Care in Primary Care	Sexual and reproductive rights from a gender perspective. Public policies for women's health care. Demographic and epidemiological profile and women's health indicators. Female vulnerabilities. Sexual and reproductive health. Sexual diversity. Women's health issues: sexually transmitted infections. Gynecological conditions: vaginitis, vulvitis, cervicitis, fibroids, ovarian cysts, endometriosis, breast dysplasias. Prevention of cervical cancer and early detection of breast cancer.
UFMT	Adult Health Nursing	Know the epidemiology, mode of infection, clinical manifestation, and diagnosis of HIV/AIDS. Understanding nursing care for people living with HIV/AIDS. Programmatic Content: epidemiology in the world and Brazil. Ways of infection and pathophysiology. Diagnosis, rapid test, and treatment. HIV/AIDS prevention. Nursing care for patients affected by the HIV/AIDS virus.
UFRGS	Nursing Care for Women and Newborns	Infectious diseases HIV/Syphilis and their impact on the health of women, fetuses, and newborns. Nursing care for women with vaginitis and vaginosis. Nursing care in the climacteric.
UFRJ	Interdepartmental Curriculum Program II: Adolescent and young people's health	Gender and sexuality in adolescence: concepts of gender, sex, sexuality, and sexual relations, psychosocial aspects, natural and artificial contraceptive methods. STI: characterization of infections, signs and symptoms, health education, preventive care, and the importance of nursing actions. Trichomoniasis, herpes, syphilis, gonorrhea, condyloma, and AIDS. Preventive care in heterosexual and same-sex relationships.

Source: The authors (2023), documents made available by the teachers (2023).

The teaching strategies and actions focused on the theme span various areas of knowledge and spaces inherent to nursing practice. The teaching of STIs with greater

epidemiological expressions and the profession's role in promotion, prevention, and control is offered. According to a survey of the frequency with which each STI was mentioned in interviews with teachers, the focus in teaching approaches is HIV/AIDS (n=21), Syphilis (n=19), HPV (n=10), Hepatitis (n=08), Gonorrhoea (n=7), Candidiasis (n=4), Chlamydia (n=3) and HTLV, Herpes, Chancroid, Condyloma (n=2).

Articulation of teaching with public policies

It is possible to verify that the teachers involved in teaching the subject resort to and use the current public policies related to the topic. Beyond what is advocated at the national level, there is also the association of the local epidemiological framework and the conduct and guidelines of each region.

One of the school's concerns is maintaining a strong political marker to defend the SUS in the curriculum. And I feel that we have, in our curriculum here, a very political bias, political for the SUS, political for public policy, and in our studies, what I feel and see from some investigations is that we have always referred to this place. But where are the public policies? What is their role? Why aren't they present here? And I've been trying to make rescues. (E12UFBA)

Health policies are the first, starting with policies, epidemiology, pathology, and SNC. We had all the manuals from the Ministry of Health, the policies, and the protocols. We worked on local and global epidemiology, at the level of Brazil and more locally than we had, and then we worked on pathology and finished with the SNC, with protocol. (E13UFAM)

I don't even work on books, on anything; I say that my references are the policies, the protocols, and everything that the Ministry of Health recommends. But, like, it's not something that comes from the course; it's our movement. (E14UFMT)

Public policies appear as guiding material for teaching in all institutions, starting from the articulation of the course in making them available in the subjects in their teaching plans and from the teachers themselves in the lesson plans. There is also an important connection with current materials on the subject, strengthening the SUS, and the nursing care practices in the face of this issue.

Performance as a teacher on the subject

It is important to identify curricular units and educational activities on STIs within nursing curricula to obtain an overview of how the subject is introduced to students. Beyond structuring courses and their curricula, it is important to highlight the role of the teachers involved in this teaching articulation and their autonomy in developing their strategies in the teaching and learning process.

In 1992, at least until 1993/1994, this theme was the focus of my activities. Oriented more towards the female audience, for the female population. But as I also had involvement in other subjects, for example, I worked in health education. Then we somehow brought this theme to health education. I worked in public health, and we also brought this for some time, to public health. (E2UFBA)

I was much more involved with education and prevention activities, educational activities for preventing STIs; I worked a lot with schools, sexual education workshops at school, and the possibilities and prevention technologies I worked on initially. But currently, with the advancement of public policies and all the technological support in primary care, today we can perform the diagnosis, for example, of HIV, through rapid tests. (E11UFRGS)

In 2005, the contents of duties were distributed. So it was left for me to talk about acute and chronic renal, STIs, and leprosy, these three. (E15UFMT)

The trajectory of teacher participation and its articulation with teaching is diverse, with approaches to the theme due to the need for adaptation to promote teaching in a specific area of coverage or discipline. Others present themselves as references due to the expertise they have developed over time in carrying out their teaching activities, and there is still a pursuit for the improvement of knowledge.

DISCUSSION

Active student involvement in learning activities is important for success in the profession. Identifying the best teaching strategies to promote student engagement in theoretical-practical environments has always been a challenge for nursing educators. Thus, it is essential to support teaching with a set of strategies to favor and increase the engagement of these students¹⁶.

In light of the teachers' narratives, it is noticeable that the teaching process scenarios are diverse, extending beyond the classroom and encompassing theoretical-practical fields (Basic Health Units, Testing, and Counseling Centers, Specialized Care Services, clinics, schools, and laboratories, among other spaces). A study points out that the scenarios and strategies used in developing educational activities for undergraduate nursing students worldwide are diverse: internship environments, extension activities, lectures, use of technologies, laboratories, events, participation of experts, and people living with HIV, among others¹⁷.

Various methodologies are also highlighted when considering the promotion of teaching, such as workshops, concept maps, case studies, professional participation, and PVHIV. Studies conducted regarding the use of active methodologies in nursing student education identified that problem-solving, focus groups, simulation, clinical cases, practical classes in internships, and laboratory, among others, stood out¹⁸⁻¹⁹. The use of these different strategies in nursing education makes professionals more independent and prepared to work in teams and engage with the social reality¹⁸.

In terms of the expression of the theme in the curriculum, it is possible to identify that most educational activities are related to HIV/AIDS, syphilis, hepatitis, and HPV, a fact that is in agreement with findings on the teaching of this theme to undergraduate students worldwide¹⁷, as well as the epidemiological indices that have a strong expression of cases in these infections. Themes such as condyloma, gonorrhea, chlamydia, HTLV, herpes, and candidiasis appear discreetly and/or occasionally in the approaches.

The reports show the use of current and existing policies to manage this issue, such as the Brazilian Clinical Protocol and Therapeutic Guidelines for Comprehensive Care for People with Sexually Transmitted Infections (PCDT-IST). Continuous qualification of

epidemiological information is necessary to better understand the magnitude and trend of STIs in the country so that appropriate surveillance, prevention, and control actions occur²⁰.

It is believed that nursing professionals have knowledge about HIV, as they are frequently in contact with related topics. A study indicates that most nursing students felt prepared to address issues related to sexual health. However, there were some barriers regarding the assessment of people's sexuality, such as religion, culture, and care for the opposite sex²¹. Another evidence points to the attitudes, perceptions, and fears of students related to the lack of knowledge, and that education about HIV/AIDS can contribute to the development of positive attitudes in caregiving²².

Teachers play an important role in developing strategies to reduce these barriers and disseminating preventive education to reduce individual and social risks in the community. Education about nursing care on this theme is of great relevance in nursing curricula so that there is a reflection on the needs and vulnerabilities of different clientele. Identifying specific target populations in educational activities is possible, with a strong focus on women's and adult health.

Although epidemiological indices show the concentration of cases in the age groups of 15 to 49 years²³, there are several aspects worth discussing regarding STIs, for example, street clinic work to reduce harm and vulnerability to STIs, alcohol and drug use²⁴; assistance to African-American, black, and Latin American people living with HIV and violence²⁵; factors associated with the work environment of sex workers and their influence on exposure to HIV and other infections²⁶; for the elderly population, age alone is not a condition identified by the priority strategies of public health policies aimed at STIs, however, the decade of 2020-2030 was established as the decade of healthy aging²⁷.

Such situations highlight the scope of vulnerability and its dimensions (individual, social, and programmatic), and how these are strongly associated with the social determinants of health and their impacts on inequities²⁸⁻²⁹. The Social Determinants of Health (SDH), such as socioeconomic level, education, and access to health and care, are inextricably linked to health disparities. Vulnerability presents itself and is guided by the degree of exposure to a certain situation that may cause greater susceptibility to illness in a person or group in the face of a health issue.

The WHO identifies key populations for HIV as men who have sex with men, transgender people, sex workers, people who inject drugs, and people in prisons. It highlights that, particularly in these populations, social, structural, and contextual factors tend to increase vulnerability to HIV, viral hepatitis, and STIs²³. The focus of educational activities needs to go beyond the life cycles of human beings, covering the various factors and vulnerabilities in the face of the possibility of acquiring an STI. Health education for undergraduate nursing students should provide opportunities for reflection beyond diagnosis and treatment: as the DCN-ENF advocates, they need to foster the development of future nurses' ability to act in the face of the epidemiological scenario.

The limitations of the study may be related to conducting interviews online with instabilities and scheduling difficulties, low acceptance to participate in the study due to personal issues, or not receiving/reading the invitations sent via email. Access to institutional pages of complete documents is another limiting factor.

The study provides an overview of STI education for undergraduate nursing students in Brazil. Through the findings, undergraduate courses can identify gaps in the teaching process and/or enhance programmatic activities in their curricula, aiming for comprehensive training on the subject.

FINAL CONSIDERATIONS

STIs are an important topic for the health education of undergraduate nursing students, justified by epidemiological indices and their impact on public health. The approach to the topic within the curricula is evidenced in theoretical and practical classes within internship environments and fields of nursing practice. Teaching is based on raising students' awareness about the promotion, prevention, diagnosis, and treatment of these infections.

Teachers play a fundamental role in the implementation of education, as by addressing the topic programmatically in their subjects, they are promoting specialized knowledge with updated and evidence-based information, which will allow students to be prepared to deal with the challenges of care practice related to STIs. Education is present in all institutions strongly associated with the human life cycle, requiring reflections on the various factors that make an individual vulnerable.

ACKNOWLEDGMENTS

Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) - Finance Code 001.

REFERENCES

1. Brasil. Resolução nº3, de 07 de novembro de 2001. Institui Diretrizes Curriculares Nacionais do Curso de Graduação em Enfermagem [Internet]. Brasília, 2001 [cited 2024 Apr. 25]. Available from: <http://portal.mec.gov.br/cne/arquivos/pdf/CES03.pdf>
2. Brasil. Resolução nº4, de 25 de fevereiro de 1972. Rev Bras Enferm. [Internet]. 1973 [cited 2024 Apr. 25]; 26(4-5):361-3. Available from: <https://doi.org/10.1590/0034-716719730005000017>
3. Gomes JB, Zoboli ELCP, Saito DYT, Gryschek ALFPL, Schweitzer MC. Nursing students' attitudes regarding transmissible diseases. Cogitare Enferm. [Internet]. 2012 [cited 2024 Apr. 25]; 17(3):423-29. Available from: <http://dx.doi.org/10.5380/ce.v17i3.25193>
4. Pereira EG, So KNS, Ciosak SI, Otrenti E, Nichiata LYI. Portfolio in education in health: contribution to reflection from its use at the discipline Nursing in Communicable Diseases. ABCS Health Sci. [Internet]. 2015 [cited 2024 Apr. 25]; 40(3):329-32. Available from: <https://doi.org/10.7322/abcshs.v40i3.816>
5. Prize NBT, Kanat SS, Wruble ACKW. Gaps in sexual health content of healthcare professional curriculum: a systematic review of educational interventions. BMC Med Educ. [Internet]. 2023 [cited 2024 Apr. 25]; 23:926. Available from: <https://doi.org/10.1186/s12909-023-04901-1>
6. Saus-Ortega C, Ballestar-Tarín ML, Chover-Sierra E, Martínez-Sabater A. Contents of the sexual and reproductive health subject in the undergraduate nursing curricula of spanish universities: a cross-sectional study. Int J Environ Res Public Health. [Internet]. 2021 [cited 2024 Apr. 25]; 18(21):11472. Available from: <https://doi.org/10.3390/ijerph182111472>
7. Pretorius D, Couper I, Mlambo M. Sexual history taking: Perspectives on doctor-patient interactions during routine consultations in rural primary care in South Africa. Sex Med. [Internet]. 2021 [cited 2024 Apr. 25]; 9(4):1-13. Available from: <https://doi.org/10.1016/j.esxm.2021.100389>

8. Rosser S, Mkoka DA, Rohloff CT, Mgopa LR, Ross MW, Lukumay GG, *et al.* Tailoring a sexual health curriculum to the sexual health challenges seen by midwifery, nursing and medical providers and students in Tanzania. *Afri J Prim Health Care Fam Med.* [Internet]. 2022 [cited 2024 Apr. 25]; 14(1):1-9. Available from: <https://doi.org/10.4102/phcfm.v14i1.3434>
9. World Health Organization (WHO). Sexually transmitted infections (STIs). Key facts [Internet]. 2022 [cited 2024 Apr. 25]. Available from: [https://www.who.int/news-room/fact-sheets/detail/sexually-transmitted-infections-\(stis\)](https://www.who.int/news-room/fact-sheets/detail/sexually-transmitted-infections-(stis))
10. Andrade B, Pedebos LA, Silva ACS, Amante LN, Paes LG, Paese F. Diagnosis and treatment of sexually transmitted diseases performed by nurses in Primary Health Care. *Rev. bras. med. fam. comunidade.* [Internet]. 2022 [cited 2024 Apr. 25]; 17(44):1-9. Available from: [https://doi.org/10.5712/rbmf17\(44\)2755](https://doi.org/10.5712/rbmf17(44)2755)
11. Ferreira AGN, Pinheiro PNC, Vieira NFC, Lopes MVO, Gubert FA, Trasferetti JA, *et al.* Website on sexuality and prevention of sexually transmitted infections for catholic teenagers. *Acta Paul. Enferm.* [Internet]. 2020 [cited 2024 Apr. 25]; 33:1-10. Available from: <https://doi.org/10.37689/acta-ape/2020AO02605>
12. Silva DL, Araújo Júnior DG, Silva JA, Silva PRR. STI prevention strategies carried out by nurses in primary health care: an integrative review. *Braz J Health Rev.* [Internet]. 2021 [cited 2024 Apr. 25]; 4(2):4028-44. Available from: <https://doi.org/10.34119/bjhrv4n2-004>
13. Polit DF, Beck CT. *Fundamentos de pesquisa em enfermagem: avaliação de evidências para a prática da Enfermagem.* Porto Alegre: Artmed; 2018. 456 p.
14. Souza VRS, Marziale MHP, Silva GTR, Nascimento PL. Translation and validation into Brazilian Portuguese and assessment of the COREQ checklist. *Acta Paul. Enferm.* [Internet]. 2021 [cited 2024 Apr. 25]; 34:eAPE02631. Available from: <https://doi.org/10.37689/acta-ape/2021AO02631>
15. Bardin L. *Análise de Conteúdo.* São Paulo: Edições 70; 2016. 288 p.
16. Ghasemi MR, Moonaghi HK, Heydari A. Strategies for sustaining and enhancing nursing students' engagement in academic and clinical settings: a narrative review. *Korean J Med. Educ.* [Internet]. 2020 [cited 2024 Apr. 25]; 32(2):103-17. Available from: <https://doi.org/10.3946/kjme.2020.159>
17. Petry S, Padilha MI, Mazera MS, Silva AR. How to teach incurable sexually transmitted infections to undergraduate nursing students: a scoping review. *Cogitare Enferm.* [Internet]. 2023 [cited 2024 Apr. 25]; 28:1-19. Available from: <https://doi.org/10.1590/ce.v28i0.84550>
18. Jurado SR, Vidal VGA, Silva AV, Moreira AS, Bassler TC, Sanchez A. Active methodologies in nursing students education: a systematic review. *Nursing* [Internet]. 2019 [cited 2024 Apr. 25]; 22(259):3457-64. Available from: <https://www.revistanursing.com.br/index.php/revistanursing/article/view/455/429>
19. Fontana RT, Wachekowski G, Barbosa SSN. The methodologies used in nursing teaching: the students speak. *Educ. rev.* [Internet]. 2020 [cited 2024 Apr. 25]; 36:1-18. Available from: <https://doi.org/10.1590/0102-4698220371>
20. Ministério da Saúde (BR). *Protocolo clínico e diretrizes terapêuticas para atenção integral às pessoas com infecções sexualmente transmissíveis - IST* [Internet]. Brasília: Ministério da Saúde; 2022 [cited 2024 Apr. 25]. Available from: <https://www.gov.br/aids/pt-br/central-de-conteudo/pcdts/2022/ist/pcdt-ist-2022-isbn-1.pdf/view>
21. Jadoon SB, Nassir S, Victor G, Pienaar AJ. Knowledge attitudes and readiness of nursing students in assessing peoples' sexual health problems. *Nurse Educ Today.* [Internet]. 2023 [cited 2024 Apr. 25]; 113:105371. Available from: <https://doi.org/10.1016/j.nedt.2022.105371>
22. Waluyo A, Mansyur M, Earnshaw VA, Steffen A, Herawati T, Maria R, *et al.* Exploring HIV stigma among future healthcare providers in Indonesia. *AIDS care.* [Internet]. 2022 [cited 2024 Apr. 25]; 34(1):29-38. Available from: <https://doi.org/10.1080/09540121.2021.1897777>

23. World Health Organization (WHO). Consolidated guidelines on HIV, viral hepatitis and STI prevention, diagnosis, treatment and care for key populations [Internet]. Geneva: World Health Organization; 2022 [cited 2024 Apr. 25]. Available from: <https://www.who.int/publications/i/item/9789240052390>
24. Medeiros PFP, Rameh-de-Albuquerque RC, Almeida RBF, Campos-Boulitreau ARL, Valois-Santos NT, Marques ALM. 'Street Outreach Teams': care in the territory at the interface between HIV/AIDS, drugs and Harm Reduction. *Saude debate*. [Internet]. 2023 [cited 2024 Apr. 25]; 47(136):308-17. Available from: <https://doi.org/10.1590/0103-1104202313620>
25. Freeman R, Gwadz M, Wilton L, Collins LM, Dorsen C, Hawkins RL, et al. Understanding long-term HIV survivorship among African American/Black and Latinx persons living with HIV in the United States: a qualitative exploration through the lens of symbolic violence. *Int J Equity Health*. [Internet]. 2020 [cited 2024 Apr. 25]; 19(146):1-23. Available from: <https://doi.org/10.1186/s12939-020-01253-w>
26. Lopez-Corbeto E, Sanclemente C, González V, Mansilla R, Casabona J, Folch C. Chlamydia and gonorrhoea vulnerability depending to sex work site. *Enferm Infecc Microbiol Clin*. [Internet]. 2022 [cited 2024 Apr. 25]; 40(4):166-71. Available from: <https://doi.org/10.1016/j.eimce.2022.02.001>
27. Thiyagarajan JA, Mikton C, Harwood RH, Gichu M, Gaigbe-Togbe V, Jhamba T, et al. The UN Decade of healthy ageing: strengthening measurement for monitoring health and wellbeing of older people. *Age Ageing*. [Internet]. 2022 [cited 2024 Apr. 25]; 51(7):1-5. Available from: <https://doi.org/10.1093/ageing/afac147>
28. Ayres JR, Paiva V, França Júnior I. Conceitos e práticas de prevenção: da história natural da doença ao quadro da vulnerabilidade e direitos humanos. In: Paiva V, Ayres JR, Buchalla CM. *Vulnerabilidade e direitos humanos: prevenção e promoção da saúde: da doença à cidadania*. Curitiba: Juruá, 2012. p. 43-94.
29. Dahlgren G, Whitehead M. Policies and strategies to promote social equity in health. Background document to WHO - Strategy paper for Europe. Institute for Future Studies. [Internet]. 2007 [cited 2024 Apr. 25]. Available from: <https://core.ac.uk/download/pdf/6472456.pdf>

*Article extracted from the doctoral thesis: "ENSINO DAS INFECÇÕES SEXUALMENTE TRANSMISSÍVEIS NOS CURSOS DE GRADUAÇÃO EM ENFERMAGEM DO BRASIL: UM ESTUDO HISTÓRICO", Universidade Federal de Santa Catarina, Florianópolis, SC, Brasil, 2023.

Received: 27/06/2024

Approved: 20/08/2024

Associate editor: Dr. Gilberto Tadeu Reis da Silva

Corresponding author:

Stéfany Petry

Universidade Federal de Santa Catarina

Rua Delfino Conti, SN, Trindade, Florianópolis, Santa Catarina, Brasil

E-mail: petrystefany@gmail.com

Role of Authors:

Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work - **Petry S, Padilha MI**. Drafting the work or revising it critically for important intellectual content - **Petry S, Padilha MI**. Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved - **Petry S, Padilha MI**. All authors approved the final version of the text.

ISSN 2176-9133



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).