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Can sexuality teaching be monitored? An analysis of curricular documentation among Brazilian public medical schools

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Abstract

Background: Sexuality is part of clinical care and of health policy, yet how Brazilian medical schools teach it is poorly documented, particularly at state universities. Without public curricular information, national monitoring is not possible. We assess whether sexuality teaching in undergraduate medical programs can be monitored from public documents, to characterize and compare its curricular inclusion at Brazilian federal and state universities.

Methods: We conducted a national documentary study of institutional records available through August 2026. Programs/campuses were first classified as having sufficient or insufficient evidence. Those with sufficient evidence were then classified by form of inclusion, required and total provision, mode of incorporation, longitudinal integration, confirmation of teaching delivery, administrative affiliation, and region.

Results: Among 91 universities and 124 programs/campuses, only 21 had public documentation sufficient for classification. In these, sexuality was integrated into required components in 15, offered as a standalone elective course in five, and offered as a standalone required course in one. Seventeen had an explicit required offering, four had only elective provision, and teaching delivery was confirmed in seven. Standalone courses were found only at federal universities, whereas classifiable state-university records contained only integrated content. Most documented offerings appeared in a single curricular period. Detailed syllabi varied considerably; most centered on women's health, reproduction, and family planning, although some also addressed diversity, violence, clinical communication, rights, and primary care.

Conclusions: For most public programs/campuses, the available documents do not allow sexuality teaching to be verified, and our findings describe what the formal curriculum shows, not the true

prevalence of teaching. Where the curriculum could be characterized, sexuality was usually integrated into other components, concentrated in one period, and unevenly specified. More transparent curricular documentation is a precondition for curricular review and for assessing whether national competencies reach all medical students.
Keywords: Sexuality; medical education; curriculum; public universities; Brazil.

Background

Sexuality is central to human experience and health across the life course. According to the World Health Organization, it encompasses sex, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy, and reproduction [1]. Biological, psychological, social, economic, cultural, political, and historical factors shape its expression. Sexual health refers to physical, emotional, mental, and social well-being in relation to sexuality. It calls for a positive and respectful approach free from coercion, discrimination, and violence [2].

Medical education should equip students to take a sexual history sensitively, recognize concerns that patients may not voice, and provide appropriate care in matters involving sexual practices, reproduction, sexual dysfunction, violence, gender identity, and sexual orientation. A 2023 systematic review of 36 educational interventions from several countries found substantial variation in the duration, content, and assessment methods used in sexual health education [3]. A Brazilian cross-sectional study of 70 gynecologists also identified knowledge gaps and barriers to addressing the sexual health of women during menopause, pointing to shortcomings that affect training and professional practice alike [4].

In Brazil, this discussion must be grounded on the principles of universality, comprehensiveness, and equity that guide the Brazilian Unified Health System (*Sistema Único de Saúde*, SUS). The National Policy for Comprehensive LGBT Health recognizes that stigma and discrimination create barriers to access and specific health needs; it assigns professional education a strategic role in improving care [5]. The National Curriculum Guidelines for Undergraduate Medical Education, updated in 2025, call for critical, ethical, humanistic, and socially accountable training, with progressive exposure to practice settings and attention to population health needs [6].

Despite this policy framework, studies from different Brazilian settings have identified persistent shortcomings. In Santa Catarina, a cross-sectional study of 164 fifth- and sixth-year students at public and private medical schools found that 79.9% considered teaching in sexual medicine insufficient or inadequate; 87.8% made the same assessment of teaching on gender issues [7]. In a qualitative study with students at a federal university in the same state, participants described sexuality as appearing sporadically, with little connection among clinical, social, and relational content [8]. Interviews with 16 faculty members at a medical school in São Paulo revealed no institutional guidelines and limited faculty preparation; biologically reductive approaches remained common [9].

A previous documentary analysis, conducted in 2019, examined 78 Program Pedagogical Projects (PPPs) from 54 Brazilian federal universities and found important differences in the presence and framing of gender and sexuality [10]. That study did not include state universities or systematically examine features such as required versus elective provision, standalone versus integrated delivery, and continuity across the program. Recent expansion in undergraduate medical education (of approximately 102.2% between 2010 and 2021), together with uneven publication of curricular documents, makes a national update necessary [11].

This study characterizes and compares the inclusion of sexuality in the curricula of undergraduate medical programs at Brazilian federal and state universities, by assessing whether sexuality teaching in undergraduate medical programs can be monitored from public documents. The national comparison provides a baseline for revising PPPs, monitoring the National Curriculum Guidelines, and developing educational competencies that support medical practice responsive to sexual and gender diversity.

Methods

Study design

We conducted a nationwide descriptive documentary study of how sexuality is incorporated into undergraduate medical programs at Brazilian federal and state universities. The study examined the formal curriculum, defined as the components, content, and training pathways recorded in official institutional documents [12].

Study universe

We defined the universe from two reference sources: Cadastro e-MEC, the National Registry of Higher Education Programs and Institutions [13], and the 2024 Higher Education Census of the Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira, which draws on e-MEC records [14]. The 2024 microdata omitted programs launched afterward, so we updated the list using institutional portals, official program webpages, admissions notices, enrollment announcements, and other academic documents published by the universities. The universe was finalized in August 2026 and comprised 91 public universities offering Medicine, 61 federal and 30 state. We classified them by administrative affiliation, state, and macroregion (North, Northeast, Central-West, Southeast, and South) (Additional file 1).

The university defined the universe, but evidence was extracted for each program/campus, because a university with several locations cannot be assumed to share one curriculum. We recorded whether campuses shared the same curricular organization and treated differences between them as findings. A university-level summary was derived from the program/campus data.

Documentary sources and cutoff

For each program/campus, we sought documents that reconstruct its formal organization: PPPs, current curriculum matrices, syllabi and teaching plans, catalogs of curricular components, academic regulations, official program and department webpages, institutional undergraduate systems, notices offering elective components, and public records of teaching activities. We searched the official portals of the universities and their programs (Additional file 1). When several versions of a document existed, we used the version in force during the reference period. Older versions were used only when no current one could be found, and this was recorded in the database. Social media posts, news items without institutional affiliation, student-organization webpages, and third-party information helped locate documents but were not used as primary evidence.

We considered only documents published by the end of the first academic semester of 2026, and data collection closed on August 15, 2026. Proposals under review, unpublished changes, and components planned for later periods may therefore be missing.

Document search and classification

We reviewed each document in full and searched its text for Portuguese terms related to sexuality: sexuality, sexual health, sexual medicine, human sexuality, sex, gender, gender identity, sexual orientation, sexual diversity, sexual rights, reproductive health, sexual dysfunction, sexual violence, LGBT population, LGBTI+, and LGBTQIA+. A term alone did not establish inclusion. We read every occurrence in context (syllabus, learning objectives, content, and position in the curriculum matrix) and recorded inclusion only when a component title, syllabus, or other official document explicitly indicated sexuality content (Additional file 2, Fig. S1).

The primary variable, curricular inclusion of sexuality, had six mutually exclusive categories: standalone required course; standalone elective course; content integrated into required components; content integrated only into elective components; content not identified in complete documents; and insufficient information. The category "not identified in complete documents" was reserved for cases where complete documentation allowed the topic to be responsibly excluded. When documents did not support a reliable decision, we assumed neither presence nor absence and coded the case as insufficient information.

Complementary variables were as follows. *Required offering* meant at least one required component that explicitly mentioned sexuality, and *total offering* included required and elective components. *Mode of incorporation* was standalone, integrated, or both. *Longitudinal integration* was single period, multiple periods, or throughout the program. *Teaching delivery* was considered confirmed only when an additional public record showed that the component was offered in the period or year analyzed, and otherwise it was coded as not assessed. *Level of documentary evidence* was graded as high, medium, low, or insufficient.

We also recorded university, acronym, program, campus, administrative affiliation, municipality, state, macroregion, number of campuses, shared curriculum, program age, and year of the most recent revision of the PPP or curriculum matrix. Where syllabi were detailed enough, we

described content domains and pedagogical orientation qualitatively. We did not assign 0–3 domain scores or a pedagogical orientation to each program, because those codes require complete syllabi with verifiable learning objectives, practical activities, or assessment. Full operational definitions are in Additional file 2.

Data extraction and quality control

We extracted data into a structured Microsoft Excel spreadsheet based on a data dictionary developed beforehand and retained for each classification the supporting document and passage. The first and second authors reviewed all records. When sources conflicted, we gave priority to the most recent and most specific document, in this order: current teaching plan or syllabus, updated curriculum matrix, PPP, academic system, and institutional webpage. The two authors resolved disagreements by discussion, applying the operational definitions in the data dictionary (Additional file 2). We did not impute missing documentary data.

Data analysis

We calculated absolute and relative frequencies. Proportions in the classification of inclusion used all programs/campuses in the relevant group (all, by affiliation, or by macroregion) as the denominator, and proportions for the other characteristics used classifiable programs/campuses. We first described federal and state programs/campuses separately and then compared them by percentage-point differences and ratios of proportions. We also examined distributions across the five macroregions and summarized at the university level whether at least one program/campus showed explicit inclusion.

Cases classified as insufficient information remained a distinct category and were not redistributed among the other responses. The study covered the identified universe of public medical programs rather than a sample, so we did not use inferential tests. The results are presented in five descriptive tables and a map of the distribution of universities (Fig. 1). We limited our interpretation to the formal curriculum identified, except where additional records confirmed that teaching had been delivered.

Ethical considerations

We analyzed only publicly available institutional documents. No students, faculty members, or staff were recruited or directly involved, and no identifiable or sensitive personal data were collected. The research was conducted in accordance with the ethical principles of the Declaration of Helsinki, in line with current Brazilian research and ethics legislation [15, 16].

Results

Study universe

We identified 91 public universities offering Medicine, comprising 124 programs/campuses (Table 1, Fig. 1). Federal institutions accounted for 61 universities (67.0%) and 82 programs/campuses (66.1%), and state institutions for 30 universities (33.0%) and 42 programs/campuses (33.9%). Twenty-eight universities (30.8%) offered Medicine in more than one location, which accounts for 33 additional programs/campuses. Because classifications differed between campuses of the same university in 11 of these 28 institutions, we report frequencies at the program/campus level, where evidence was extracted, and give a university-level summary separately. The Northeast had the largest share of universities (n = 30; 33.0%) and programs/campuses (n = 47; 37.9%), followed by the Southeast (22 and 29), South (16 and 20), North (12 and 15), and Central-West (11 and 13). These counts serve as the denominators for regional comparisons.

Table 1. Distribution of universities and medical programs/campuses included in the study by macroregion, Brazil, 2026.

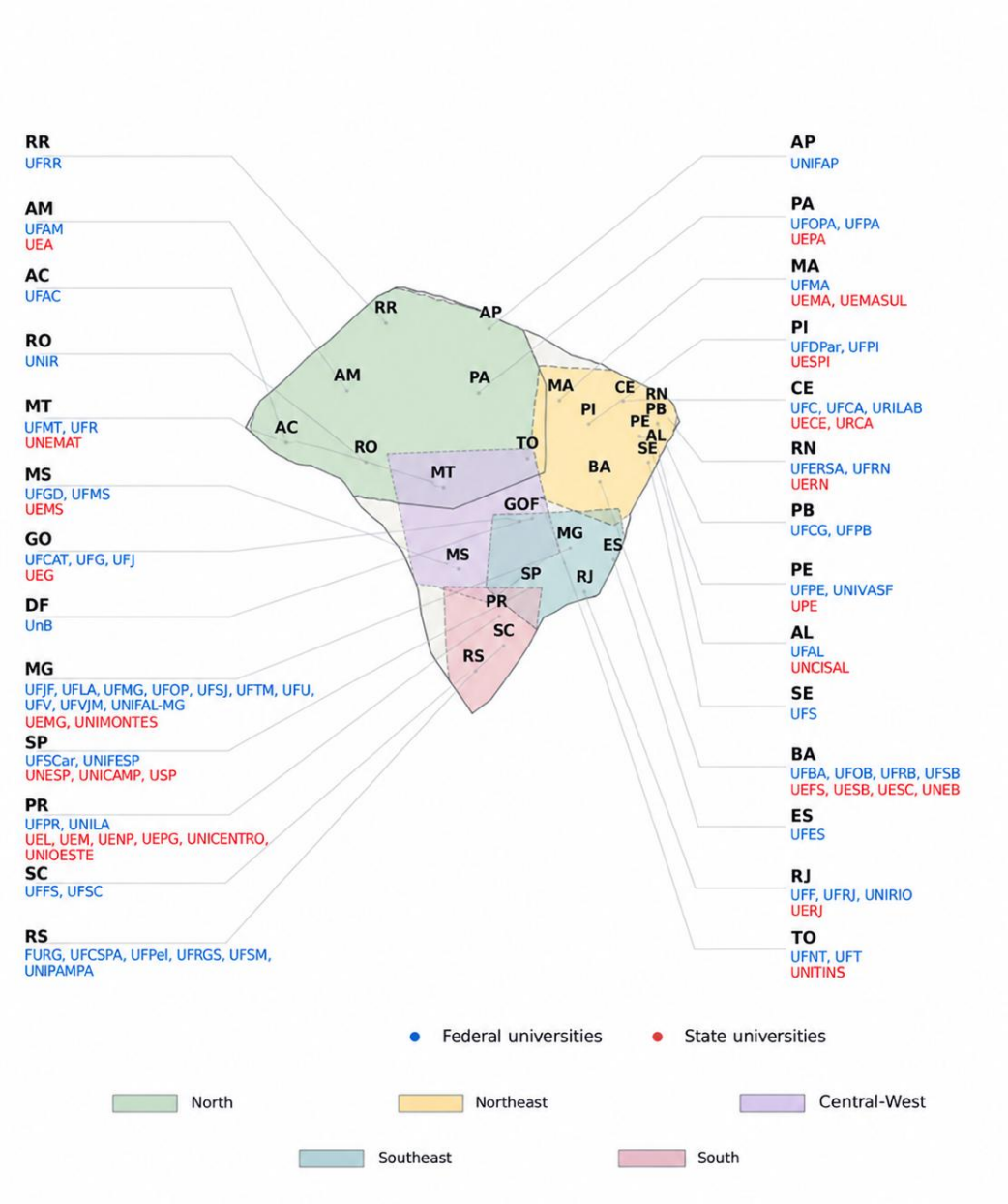
Macroregion	Universities, n (%)	Federal, n	State, n	Medical programs/campuses, n (%)
North	12 (13.2)	9	3	15 (12.1)
Northeast	30 (33.0)	18	12	47 (37.9)
Central-West	11 (12.1)	8	3	13 (10.5)
Southeast	22 (24.2)	16	6	29 (23.4)
South	16 (17.6)	10	6	20 (16.1)
Total	91 (100.0)	61	30	124 (100.0)

Source: The authors.

Availability of public documentation

Public documents were sufficient to classify the curricular inclusion of sexuality in only 21 of 124 programs/campuses (16.9%). For the other 103 (83.1%), the accessible records did not support a reliable classification and were coded as insufficient information. No program/campus was coded as “content not identified in complete documents”, a category that requires a full document review capable of excluding the topic; public records were generally incomplete, outdated, or too brief for that, so the national result reflects limited access to curricular documentation, not an estimate that sexuality teaching is absent.

Fig. 1. Distribution of Brazilian public universities offering Medicine by administrative affiliation and geographic macroregion, Brazil, 2026.



Source: The authors. *Note*: Abbreviations in bold represent Brazilian states. See the supplementary materials for further regional detail.

Curricular characteristics of classifiable programs/campuses

Of the 21 classifiable programs/campuses, 15 (71.4%) integrated sexuality into required components, five (23.8%) offered a standalone elective course, and one (4.8%) offered a standalone required course. None limited the content to elective components (Table 2). Seventeen (81.0%) had a required offering and four (19.0%) had only elective provision; one program combined a standalone elective with required integrated content, which is why required offerings exceed the 16 programs classified as required in the main categories. Content appeared in a single curricular period in 18 programs/campuses (85.7%) and in multiple periods in three (14.3%); none was documented as continuous across the whole program. Teaching delivery was confirmed in seven programs/campuses

(33.3% of those classifiable; 5.6% of all 124). Delivery was not inferred from curricular documents alone and was recorded as not assessed in the remaining cases. Evidence quality was high in 18 and medium in three.

Table 2. Curricular inclusion of sexuality in medical programs/campuses, Brazil, 2026.

Characteristics	n	%
Classification of curricular inclusion (n = 124)		
Standalone required course	1	0.8
Standalone elective course	5	4.0
Content integrated into required components	15	12.1
Content integrated only into elective components	0	0.0
Content not identified in complete documents	0	0.0
Insufficient information	103	83.1
Characteristics of classifiable programs/campuses (n = 21)		
Required offering: yes / elective only	17 / 4	81.0 / 19.0
Mode of incorporation: integrated / standalone / both	15 / 5 / 1	71.4 / 23.8 / 4.8
Distribution: single period / multiple periods / throughout program	18 / 3 / 0	85.7 / 14.3 / 0.0
Teaching delivery confirmed	7	33.3
Level of evidence: high / medium / low	18 / 3 / 0	85.7 / 14.3 / 0.0

Source: The authors. *Note*: Teaching delivery was not assessed in the other 14 classifiable programs/campuses.

Federal vs. state universities

Classification was possible for 17 of 82 federal programs/campuses (20.7%) and 4 of 42 state programs/campuses (9.5%), a difference of 11.2 percentage points (ratio 2.18); insufficient information was recorded in 79.3% and 90.5%, respectively (Table 3). A higher proportion of classifiable records at federal universities indicates that more documentation was available there, not that sexuality is taught more often. All six standalone courses (one required, five elective) were at federal universities, as were the single program combining standalone and integrated content and all three programs with content in multiple periods. Integrated required content was the most frequent form in both sectors (11 of 17 federal records, 64.7%; 4 of 4 state records). Teaching delivery was confirmed in seven federal programs/campuses (8.5%) and in none of the state programs/campuses. Because few state records could be classified, these contrasts are descriptive.

Table 3. Descriptive comparison of federal and state programs/campuses, Brazil, 2026.

Indicator	Federal (n = 82), n (%)	State (n = 42), n (%)	Difference*	Ratio (F/S)
Classifiable (explicit curricular evidence)	17 (20.7)	4 (9.5)	+11.2	2.18
Required offering	13 (15.9)	4 (9.5)	+6.3	1.66
Standalone course	6 (7.3)	0 (0.0)	+7.3	NA
Integrated into a required component	11 (13.4)	4 (9.5)	+3.9	1.41
Content in multiple periods	3 (3.7)	0 (0.0)	+3.7	NA
Teaching delivery confirmed	7 (8.5)	0 (0.0)	+8.5	NA

Source: The authors. *Note*: *Percentage points. NA: not calculable (zero in denominator group). Proportions use each affiliation's total as the denominator. Insufficient information (the

complement of the first row) was 79.3% federal and 90.5% state. The comparisons describe the documentary evidence identified, not the actual prevalence of teaching.

Regional distribution

The proportion of classifiable programs/campuses was highest in the South (6/20; 30.0%) and North (4/15; 26.7%), followed by the Southeast (5/29; 17.2%), Northeast (5/47; 10.6%), and Central-West (1/13; 7.7%) (Table 4). The Northeast had the largest number of programs/campuses but only five could be classified, leaving 42 without sufficient documentation. Stratified by affiliation, the highest federal proportions were in the South (6/13; 46.2%), North (3/10; 30.0%), and Southeast (5/20; 25.0%), followed by the Northeast (3/29; 10.3%); no federal program/campus in the Central-West (0/10) could be classified. Among state programs/campuses, classifiable records appeared in the Central-West (1/3; 33.3%), North (1/5; 20.0%), and Northeast (2/18; 11.1%), and none in the Southeast (0/9) or South (0/7). At the university level, at least one program/campus with explicit inclusion was identified at 19 of 91 universities (20.9%), ranging from 9.1% in the Central-West to 33.3% in the North. Small state-university denominators in several regions limit these comparisons.

Table 4. Explicit curricular inclusion of sexuality by macroregion, at the program/campus and university levels, Brazil, 2026.

Macroregion	Programs/campuses, n	Explicit inclusion, n (%)	Universities, n	At least one program/campus with inclusion, n (%)
North	15	4 (26.7)	12	4 (33.3)
Northeast	47	5 (10.6)	30	5 (16.7)
Central-West	13	1 (7.7)	11	1 (9.1)
Southeast	29	5 (17.2)	22	4 (18.2)
South	20	6 (30.0)	16	5 (31.3)
Total	124	21 (16.9)	91	19 (20.9)

Source: The authors. *Note*: Explicit inclusion refers to programs/campuses with sufficient public documentation to be classified in categories 1 to 4. Percentages use the number of programs/campuses or universities in each macroregion as the denominator.

Documented characteristics of curricular components

Of the 21 classifiable programs/campuses, six (28.6%) had a standalone course and 15 (71.4%) integrated the topic into broader required components (Table 5). The standalone courses were Human Sexuality (UFAC, UFSJ, and UFRJ), Sexuality, Education, and Health (UFJF-Governador Valadares), Health and Sexuality in Adolescence (UFPR-Curitiba), and Gender, Sexuality, and Health (UFCSPA); four had publicly identifiable codes (CCSD480, MED225GV, FMG352, and MT019). Integrated components were located mainly within women's health, family planning, collective health, health practices, medical anthropology, clinical education, and the clinical internship. Content appeared in more than one component at three programs/campuses: three components at UFAC, four at UFPI, and mental-health and women's-health modules at UNILA.

Table 5. Characteristics of curricular components with explicit inclusion of sexuality (n = 21 programs/campuses), Brazil, 2026.

Characteristics	n	%
Component characteristics		
Integrated component named "women's health, reproduction, or family planning"	7/15	46.7
Curriculum code reported among standalone courses	4/6	66.7
More than one component explicitly recorded	3/21	14.3
Curricular period or phase reported	9/21	42.9
Workload		
Total workload of component reported	6/21	28.6
Workload reported among standalone courses	3/6	50.0

Source: The authors. *Note*: Note: Each row uses the denominator shown (15 integrated components, 6 standalone courses, or 21 classifiable programs/campuses). The total workload of the component was not interpreted as workload specifically allocated to sexuality.

The curricular period was stated in nine records, from the first to the ninth period, including one component in the clinical internship. Institutional nomenclature was too heterogeneous to classify components consistently as basic, clinical, or internship training. Each confirmation of delivery referred to a specific period or year and does not indicate continuous provision. Total component workload was reported in six records. Three standalone courses had clear workloads: Human Sexuality at UFAC (30 hours), Sexuality, Education, and Health at UFJF-Governador Valadares (30 hours), and Health and Sexuality in Adolescence at UFPR-Curitiba (20 hours). For integrated components, the reported workload covered the entire component; Women's Health, Human Sexuality, and Family Planning at UNIFAP, for example, was listed at 108 hours, with no breakdown for sexuality.

Integration occurred mainly within a clinical-reproductive frame. Seven of the 15 integrated records named women's health, reproduction, or family planning in the component title, and sexuality appeared in the title in three. Exceptions included medical anthropology (UFJF), collective health with immersion (UFFS), interdisciplinary extension practices (UNITINS), mental health and women's health across modules (UNILA), and psychosocial, skills-based, and internship components (UFPI). Where syllabi were detailed, content ranged across anatomy and physiology, life-course development, contraception and reproductive planning, STIs, sexual dysfunction, sexual and gender-based violence, diversity and LGBTQIA+ health, clinical communication, and sociocultural determinants.

These domains were described more fully in PPPs that specified units, activities, or practice settings than in documents listing only the component title, and an omission from a brief syllabus was not coded as absence of the domain. Biomedical-preventive and biopsychosocial approaches often coexisted within the same curriculum. The responsible department, prerequisites, teaching format, interprofessional participation, and service or community activities were not recorded systematically for all components; we noted them only where explicitly described.

Discussion

This study offers the first nationwide comprehensive account of how sexuality is incorporated into undergraduate medical education in Brazil. It brings together three dimensions that earlier Brazilian studies have usually examined separately, those of administrative affiliation, geographic distribution, and the characteristics of curricular components [17]. Our central finding is that only 21 of 124 public programs/campuses had public documentation sufficient for classification. This shifts the discussion from counting courses to asking about the quality of the curricular information available, a constraint also noted in previous documentary research [18].

Earlier national studies help interpret this pattern. Rufino et al. [19] surveyed 207 faculty members at 110 medical schools and found fragmented teaching, usually located in clinical disciplines and focused on reproduction, STIs, anatomy, physiology, and sexual dysfunction. Raimondi et al. [10] analyzed the PPPs of federal institutions and found references to gender and/or sexuality in 48 of 69. Our criteria were, however, stricter. They required an explicit course name, syllabus, or other evidence of sexuality content, and they distinguished insufficient information from curricular absence. These estimates are therefore not directly comparable, and the divergence itself shows how strongly results depend on the documentary unit and on the rule that we used to decide whether the topic is present.

Importantly, including state universities changes the picture available to date. Among programs/campuses with sufficient evidence, standalone sexuality courses appeared only at federal universities, whereas state-university records placed the topic within broader components. This difference is not to be read as evidence that federal universities teach the topic better. A standalone course may be elective and reach few students, while an integrated component may support a more sustained approach. What our data show is that the most readily identifiable forms of provision were concentrated at federal universities, and that state-university records documented sexuality mainly through content on women's health, reproduction, and family planning.

The regional pattern also calls for caution. The South and North had the highest proportions of classifiable programs/campuses, and the Northeast the lowest. The Northeast, however, also had the largest number of programs/campuses and the most records without sufficient documentation. We cannot assume that one region teaches more sexuality than another. The pattern more likely reflects the combination of unequal expansion of medical education and unequal access to the documents that describe curricular provision. For a national medical-education agenda, we understand this opacity as a substantive structural problem that goes beyond minor methodological details.

In the documents that supported analysis, sexuality appeared most often under women's health, reproduction, and family planning, consistent with research from other Brazilian settings [20]. In Piauí, Rufino et al. [19] found that sexuality was addressed mainly in gynecology, psychiatry, medical psychology, and urology, and rarely as a standalone class. In São José do Rio Preto, Olímpio et al. [21] reported teaching centered on reproduction, contraception, sexual dysfunction, and STIs.

In Rio Grande do Sul, Medeiros et al. [22] documented students' perceptions of inadequate training, especially in gender and sexual medicine. Perception studies, local experiences, and national documents thus converge. Our data, however, do not allow us to infer that programs without detailed syllabi omit other content.

Reproduction, contraception, STIs, sexual violence, and sexual dysfunction are legitimate clinical content, and no one disputes their place in medical education. The concern is that, across the studies reviewed here, the topic rarely goes further. Rufino et al. [19] and Trapani Junior et al. [7] found little attention to sexual orientation, intersex variations, gender incongruence, and the social dimensions of sexuality. Rufino et al. [19] also reported that preparation for sexual and gender diversity depended largely on individual faculty initiative rather than on an institutional pedagogical project. Sexuality taught mainly as risk or reproductive function is thus a pattern repeated across settings, not an occasional gap.

This curricular boundary has consequences for care within the SUS. Law No. 9,263 [23] recognizes family planning as a right and as part of comprehensive care for women, men, and couples, and the National Policy for Comprehensive Women's Health ties sexual and reproductive health to needs across the life course [24]. Teaching confined to disease or reproductive procedures leaves future physicians unprepared to discuss contraceptive choices, reproductive intentions, menopause, infertility, sexual dysfunction, and shared decision-making without reducing the person to a clinical condition [25].

The gap is especially consequential for LGBTQIA+ people. The National Policy for Comprehensive LGBT Health links equity, comprehensiveness, and nondiscrimination to the organization of care, with primary care as the usual entry point [26]. Associating sexual diversity only with STI prevention does not meet this obligation. Undergraduate education must cover assumption-free sexual history-taking, chosen names, gender identity, confidentiality, family relationships, and the effects of discrimination on access to and continuity of care [27–29].

Care after sexual violence shows why the topic must go beyond a mention in a syllabus. Decree No. 7,958 [30] requires humane, confidential, nondiscriminatory care, qualified listening, and coordination across the care network. Meeting these requirements means that students learn to receive patients without judgment, identify urgent needs, protect confidentiality, follow prophylaxis and referral pathways, and document or notify events when the service requires it. A brief theoretical presentation within a broad clinical course rarely develops these competencies.

The more detailed syllabi in our material show that this narrowing is not inevitable. Some programs combined clinical content with diversity, violence, clinical communication, rights, mental health, anthropology, extension activities, and primary care. Their presence does not establish comprehensive training, but it points to curricular paths beyond a model centered solely on pathology. This contrast is consistent with findings from students at a federal medical school [31] and with the perspectives of São Paulo faculty [9]. Accordingly, broader approaches depend on deliberate curricular choices, faculty preparation, and institutional mechanisms that sustain them.

In our understanding, creating a standalone course is unlikely to close the gap on its own. An extension experience in Rio Grande do Sul [32] suggests that case discussion, sexual history-taking, reflection on attitudes, and dialogue about gender can deepen knowledge and skills. Elective and extracurricular activities, however, tend to attract students who already seek out the topic. We thus argue that shared foundation requires objectives, content, methods, and assessment to be distributed recognizably across the curriculum, with opportunities for deeper study and clinical application.

For universities, these results offer a practical starting point for curricular review. Each program can check whether its documents allow readers to identify the responsible component, whether it is required or elective, the curricular period, the hours assigned to the topic, and the expected learning outcomes, without relying on informal knowledge. Where sexuality appears only under broad labels such as women's health or family planning, the syllabus should be examined to see whether it includes diversity, rights, clinical communication, and violence. While process does not replace pedagogical evaluation, it provides a verifiable basis for revising PPPs and for dialogue among coordinators, faculty, and students.

The same applies to national evaluation and to monitoring implementation of the National Curriculum Guidelines. The current Guidelines call for critical, ethical, humanistic, and socially accountable education with progressive exposure to practice settings [6], but such commitments do not automatically become verifiable curricular content. Evaluation could draw on SUS policies to ask concrete questions. Do all students learn to take a sexual history? Are there activities on reproductive planning, diversity, violence, and rights? Does teaching appear at more than one point in the program? Is there evidence that it was offered? Converting these questions into documentary indicators, and then testing them in the field, would bring educational regulation closer to the needs specified in health policies.

However, some limitations may bound our interpretations. We worked with public documents available through the cutoff date, so syllabi circulating only internally and changes approved afterward were not captured. A PPP or curriculum matrix does not confirm that content was taught to a given cohort, so we analyzed confirmation of delivery separately from presence in the formal curriculum. In broad modules, the available workload refers to the whole component and cannot be assigned specifically to sexuality. Limited detail also prevented comparison of every content domain and pedagogical feature across universities. Finally, the classification does not measure student competence, teaching quality, faculty attitudes, or effects on care.

These limitations define what our study can claim, showing where documentation is sufficient to monitor curricular provision and where such monitoring remains impossible. The next stage should bring documents closer to classroom and service practice through consultation with program coordinators, interviews with faculty, review of semester plans, observation of teaching settings, and interviews with students and graduates. Such work could determine whether the differences observed across regions and administrative affiliations correspond to differences in educational experience.

The national comparison ultimately raises questions that surpass whether a sexuality course exists. Who has access to a required offering? At what stage of training does it occur? Which content is treated as central, and which remains at the margins? Making these choices visible is necessary if Brazilian medical education is to treat sexuality as part of clinical care, rights, and the responsibilities of the SUS.

Conclusions

Public documents revealed a wider range of modes of incorporation at federal programs/campuses, whereas classifiable state-university records described only integrated content. Where classification was possible, sexuality usually appeared in a single curricular period, with little evidence of longitudinal integration. The most detailed syllabi went beyond a clinical-reproductive focus, but uneven specification prevented systematic comparison across all curricular domains. Because so many records lacked sufficient documentation, these findings describe what can be verified in the formal curriculum, not the actual prevalence of sexuality teaching. More transparent curricular documentation would allow programs and regulators to assess whether national competencies reach all medical students.

Abbreviations

e-MEC: Brazilian Ministry of Education's national registry of higher education programs and institutions (Cadastro e-MEC)
F/S: ratio of the federal to the state proportion
LGBT: lesbian, gay, bisexual, and transgender
LGBTI+: lesbian, gay, bisexual, transgender, intersex, and other identities
LGBTQIA+: lesbian, gay, bisexual, transgender, queer, intersex, asexual, and other identities
NA: not applicable
PPP: pedagogical project of the course (projeto pedagógico do curso)
STI: sexually transmitted infection
SUS: Brazilian Unified Health System (Sistema Único de Saúde)
UFAC: Federal University of Acre (Universidade Federal do Acre)
UFCSPA: Federal University of Health Sciences of Porto Alegre (Universidade Federal de Ciências da Saúde de Porto Alegre)
UFFS: Federal University of Southern Frontier (Universidade Federal da Fronteira Sul)
UFJF: Federal University of Juiz de Fora (Universidade Federal de Juiz de Fora)
UFPI: Federal University of Piauí (Universidade Federal do Piauí)
UFPR: Federal University of Paraná (Universidade Federal do Paraná)
UFRJ: Federal University of Rio de Janeiro (Universidade Federal do Rio de Janeiro)

UFSJ: Federal University of São João del-Rei (Universidade Federal de São João del-Rei)
UNIFAP: Federal University of Amapá (Universidade Federal do Amapá)
UNILA: Federal University of Latin American Integration (Universidade Federal da Integração Latino-Americana)
UNITINS: University of Tocantins (Universidade Estadual do Tocantins)

Ethics approval and consent to participate

We analyzed only publicly available institutional documents. No students, faculty members, or staff were recruited or directly involved, and no identifiable or sensitive personal data were collected. The research was conducted in accordance with the ethical principles of the Declaration of Helsinki, in line with current Brazilian research and ethics legislation.

Consent for publication

All authors read and agreed with the final version submitted. All authors take full responsibility for the discussions and analysis herein provided.

Availability of data and materials

The data supporting the findings of this study are available as supplementary material (Additional files 1 and 2). Additional file 1 lists the 91 universities and 124 programs/campuses analyzed, with the link for each institution's official webpage. Each program's pedagogical project and related curricular documents can be accessed through the corresponding university link. Additional file 2 contains the data dictionary, the classification criteria, and the classification of each program/campus. All documents analyzed are publicly available. Data collection closed on August 15, 2026, and the institutions may have updated or moved their webpages since then.

Competing interests

The authors have no competing interest to declare.

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Authors' contributions

Conceptualization: A.M.R.G. and R.S.G.-M.; Methodology: A.M.R.G. and R.S.G.-M.; Software: A.M.R.G., R.S.G.-M., and S.L.R.; Formal analysis: A.M.R.G. and R.S.G.-M.; Investigation: A.M.R.G. and R.S.G.-M.; Data curation: A.M.R.G., R.S.G.-M., S.L.R., F.S.N.C., C.R.A., A.H., and S.L.R.; Writing – original draft: A.M.R.G. and R.S.G.-M.; Writing – review &

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