7-2022

Are sexual and reproductive health and rights taught in medical school? Results from a global survey

Margit Endler

Taghreed Al-Haidari

Chiara Benedetto

Sameena Chowdhury

Jan Christilaw

See next page for additional authors

Authors

Margit Endler, Taghreed Al-Haidari, Chiara Benedetto, Sameena Chowdhury, Jan Christilaw, Faysal El Kak, Diana Galimberti, Miguel Gutierrez, Shaimaa Ibrahim, and Marleen Temmerman

Received: 21 February 2022 | Revised: 14 June 2022 | Accepted: 7 July 2022 | First published online: 4 August 2022

DOI: 10.1002/ijgo.14339

CLINICAL ARTICLE

Gynecology

Are sexual and reproductive health and rights taught in medical school? Results from a global survey

Margit Endler[1] | Taghreed Al-Haidari[2] | Chiara Benedetto[3] | Sameena Chowdhury[4] | Jan Christilaw[5] | Faysal El Kak[6,7] | Diana Galimberti[8] | Miguel Gutierrez[9] | Shaimaa Ibrahim[10] | Shantha Kumari[11] | Colleen McNicholas[12] | Desiré Mostajo Flores[13] | John Muganda[14] | Atziri Ramirez-Negrin[15] | Hemantha Senanayake[16] | Rubina Sohail[17] | Marleen Temmerman[18] | Kristina Gemzell Danielsson[1]

[1]Department of Women's and Children's Health, Karolinska Institutet and Karolinska University Hospital, Stockholm, Sweden

[2]Scientific Affairs Unit, Al Kindy College of Medicine, University of Baghdad, Baghdad, Iraq

[3]Department of Gynecology and Obstetrics, Sant'Anna University Hospital, Torino, Italy

[4]Obstetrical and Gynecological Society of Bangladesh, Dhaka, Bangladesh

[5]Faculty of Medicine, University of British Columbia, Vancouver, Canada

[6]American University of Beirut, Beirut, Lebanon

[7]International Federation of Obstetricians and Gynecologists, London, United Kingdom

[8]University of Buenos Aires, Buenos Aires, Argentina

[9]Instituto de Salud Popular (INSAP), Lima, Peru

[10]UNICEF Iraq, Baghdad, Iraq

[11]Yashoda Hospital, Hyderabad, India

[12]Planned Parenthood, St Louis, Missouri, USA

[13]The Bolivian Society of Obstetricians and Gynecologists, La Paz, Bolivia

[14]The Rwanda Society of Obstetricians and Gynecologists, Kigali, Rwanda

[15]Urogynecology Department, Hospital Dr Manuel Gea Gonzalez, Mexico City, Mexico

[16]University of Colombo, Colombo, Sri Lanka

[17]Services Institute of Medical Sciences/Services Hospital, Lahore, Pakistan

[18]Aga Khan University, Nairobi, Kenya and Ghent University, Ghent, Belgium

Correspondence
Margit Endler, Department of Women's and Children's Health, Karolinska Institutet, Tomtebodavägen 18A, 171 77 Stockholm, Sweden.
Email: margit.endler@ki.se

Abstract

Our aim was to investigate the inclusion of sexual and reproductive health and rights (SRHR) topics in medical curricula and the perceived need for, feasibility of, and barriers to teaching SRHR. We distributed a survey with questions on SRHR content, and factors regulating SRHR content, to medical universities worldwide using chain referral. Associations between high SRHR content and independent variables were analyzed using unconditional linear regression or χ^2 test. Text data were analyzed by thematic analysis. We collected data from 219 respondents, 143 universities and 54 countries. Clinical SRHR topics such as safe pregnancy and childbirth (95.7%) and

contraceptive methods (97.2%) were more frequently reported as taught compared with complex SRHR topics such as sexual violence (63.8%), unsafe abortion (65.7%), and the vulnerability of LGBTQIA persons (23.2%). High SRHR content was associated with high-income level ($P = 0.003$) and low abortion restriction ($P = 0.042$) but varied within settings. Most respondents described teaching SRHR as essential to the health of society. Complexity was cited as a barrier, as were cultural taboos, lack of stakeholder recognition, and dependency on fees and ranking.

KEYWORDS
gender equality, health equity, medical education, sexual and reproductive health and rights

1 | INTRODUCTION

Access to sexual and reproductive health and rights (SRHR) is associated with increased gender equality and breaking cycles of poverty, and the World Health Organization calls for linking SRHR to universal health programs to enhance equitable health coverage.[1–3] Most people of reproductive age will however receive inadequate sexual and reproductive health (SRH) services during their lives because of persistent barriers to access.[4]

Because of the synergy between SRHR and overall health, these topics become the domain of most medical providers.[5] Sexuality education in primary and secondary schools seems to improve sexual health and well-being and reduce SRHR violations.[6] However, little research exists about which SRHR concepts are taught at medical universities and how teachers perceive their importance and impact. A recent study from Sweden found that SRHR content in higher-level education in medical and related fields was poor, lacked comprehensiveness, and was inequitably provided across and within Swedish universities.[7] A US-Canadian expert consortium on sexual health content in medical school education concluded that content was variable and its inclusion urgent in light of high rates of poor sexual and reproductive outcomes.[8]

Our aim was to investigate to what extent SRHR topics are taught in undergraduate medical education, what factors determine SRHR curriculum content, and how the need for, feasibility of, and barriers to teaching SRHR are perceived by universities.

2 | MATERIAL AND METHODS

We analyzed the content of SRHR topics, and factors regulating SRHR content, in medical curricula, based on quantitative and qualitative data extracted from a global survey. The survey was directed at teachers or administrators involved in undergraduate medical programs but other respondents were welcome if they had direct experience of a medical curriculum.

2.1 | Survey development and population sampling

The survey questionnaire was developed by a working group within the FIGO (International Federation of Gynecology & Obstetrics) Committee for Human Rights, Refugees and Violence against Women. Three main study questions guided the content of the questionnaire (1) To what extent do universities prioritize SRHR content? (2) Which SRHR topics are taught in the curriculum? (3) What is the perceived need for, feasibility of, and barriers to including SRHR topics in the curriculum?

The questionnaire contained closed-ended questions on whether SRHR was a specified topic in the curriculum, whether teachers had been appointed to teach SRHR, how many hours were allotted to SRHR topics, the inclusion of 32 SRHR-related topics in the curriculum, and a categorical assessment of the need for, feasibility of, and barriers to teaching SRHR topics. SRHR topics were divided into (1) clinical SRH topics and (2) complex SRHR topics. Clinical SRH topics included the clinical recognition and management of pregnancy and childbirth, contraception, abortion, sexually transmitted infections, and infertility. Complex SRHR topics included the translational aspects of safe abortion and contraception in society, gender identity, SRHR violations, SRHR vulnerability, and SRHR laws and recommendations. The questionnaire contained three open-ended questions on respondents' perspectives on the need for, feasibility of, and barriers to teaching SRHR. The survey was developed in English, translated into Spanish, piloted among members of the committee, and amended in an iterative process.

The questionnaire was programmed into the research tool REDCap and distributed at three time-points between May and September 2021. We performed non-probability sampling using a chain referral process for the survey distribution. The survey was sent though the FIGO central office to the 130 National Societies of obstetrics and gynecology acting as our primary data source. The member societies then forwarded the survey invitation and online link to medical university administrations from where it was distributed to relevant teachers or administrators working within these institutions.

2.2 | Data analysis

Data for each SRHR topic present in the questionnaire were analyzed separately, according to whether the topic was included, not included, or whether its inclusion was uncertain. A total "SRHR score" was calculated for each university, which summed the number

of SRHR topics included in the curriculum. The score was calculated by a point system that accorded 2 points if the topic was included, 1 point if the inclusion was uncertain, and 0 points if the topic was not included. The total SRHR score was categorized and tested for association with background factors. The total SRHR score was also separated into a score related to the eight SRHR clinical topics (maximum score 16) and a score related to the 24 complex SRHR topics, including laws and policies (maximum score 48). Where there were multiple responses from the same university, we made an individual assessment of each question and recorded the median or most common answer.

Categorical data were summarized using descriptive statistics and reported as absolute numbers and rates. Pearson's χ^2 test was used to assess associations between categorical variables and SRHR score categories. A value of P less than 0.05 was considered significant. The total SRHR score, clinical SRHR topics score, and the complex SRHR topics score, as continuous normally distributed data, were presented as mean and standard deviation (SD). Associations between SRHR scores and two independent variables, (1) income level and (2) level of abortion restriction in the university setting, were analyzed using unconditional univariate linear regression if no confounding variables were identified.

Income levels were categorized as low, low middle, high middle, or high, according to the World Bank Categorization of income level 2020–2021.[9] Abortion legislation was categorized on a 1–6 scale, according to the Guttmacher Institute categorization of abortion legality worldwide, where categories 1–2 represent legislations that either disallow abortion completely or allow abortion only to preserve a woman's life, categories 3–4 represent legislations that also allow abortion to preserve a woman's physical or mental health, and categories 5–6 represent legislations that allow abortion on socioeconomic grounds or on-demand within gestational age limits.[10,11]

One researcher (ME) analyzed the text data extracted from the full-text answers by thematic analysis. The analysis process involved the following steps, (1) familiarization with the data through several readings of the text, (2) preliminary coding using categories drawn from our three main research questions, (3) searching for cross-cutting themes across text excerpts, and (4) defining and naming themes. The data were coded and categorized using NVivo 8 qualitative data analysis software.

The study received ethical exemption from the ethics committee at Karolinska Institutet (dnr 2020–04629). Participants consented to their anonymized responses being used for research before initiating the survey.

3 | RESULTS

3.1 | Quantitative results

The questionnaire was answered by 219 respondents from 143 universities in 54 countries. Data synthesized from multiple responses represented 21 universities. Most respondents were teachers (n = 123, 89%). Forty-four percent of respondents were from universities in Asia/Oceania, the remaining respondents were evenly distributed among the other regions. The student population ranged from below 500 to 5000 students. Half of all universities had SRHR as a specified topic (n = 74, 51.7%). One-third (n = 45, 31.5%) had teachers appointed to teach SRHR. A minority of respondents (n = 12, 8.4%) estimated that more than 20 h were spent on SRHR topics in the curriculum. SRHR as a specified topic, SRHR-appointed teachers, and more than 20 h allotted to teach SRHR, were associated with a high total SRHR score. The background characteristics of responding universities are presented in Table 1.

Most curricula included clinical SRHR topics such as the treatment of sexually transmitted infections and HIV (n = 139, 97.9%), contraceptive methods (n = 138, 97.2%), and safe pregnancy and childbirth (n = 134, 95.7%). Fewer curricula included topics related to SRHR violations and complications, such as unsafe abortion (n = 92, 65.7%), sexual violence and rape (n = 90, 63.8%), and gender-based and domestic violence (n = 74, 52.8%). Fewer than half of the curricula contained complex SRHR topics such as the determinants of SRHR (n = 65, 45.8%), interculturality (n = 52, 37.4%), and the vulnerability of LGBTQIA persons (n = 33, 23.2%), or international recommendations on SRHR (n = 29, 20.6%). Summaries of SRHR topics taught at responding universities are shown in Figure 1 (clinical SRHR topics), Figure 2 (complex SRHR topics), and Figure 3 (international laws and recommendations on SRHR).

Mean total SRHR score for all universities was 39.6 points (SD = 13.8), the corresponding means for clinical SRHR topics and complex SRHR topics were 14.7 points (SD = 2.5) and 24.9 points (SD = 12.6), respectively. Total SRHR score was associated with a high-income level (P = 0.001) and a low level of abortion restriction (P = 0.04) in the country where the university was situated. A higher score for complex SRHR topics accounted for this effect. There was no statistically significant difference between income or abortion legislation and curriculum content of clinical SRHR topics. Association between SRHR scores, income level and abortion legislation are presented in Table 2.

Most respondents reported that the listed SRHR topics should be included in medical curricula (n = 126, 88.1%) and that this was feasible (n = 109, 76.2%). Limited space in the curriculum (n = 57, 46.7%) and perceived controversy by decision makers (n = 39, 32.0%) and teachers (n = 37, 30.1%) were cited as barriers to teaching SRHR. The topics were perceived as irrelevant, and unsuitable for students by 30 (25.6%) and eight (6.5%) respondents respectively (Figure 4).

3.2 | Qualitative results

The thematic analysis was based on 218 written answers and the overarching themes were aligned with the focus of the questions in the survey: (1) the perceived need for SRHR topics in medical curricula, (2) the risks and challenges entailed in teaching SRHR, (3) the feasibility of and best approach to teaching SRHR, and (4) the barriers to teaching SRHR.

TABLE 1 Background characteristics according to curriculum content of sexual and reproductive health and rights among universities represented in a global survey ($n = 143$)[a]

	All ($n = 143$)	Total SRHR topic score			*P* value[b]
		Low	Middle	High	
Region					
Africa	10 (7.0)	3 (5.9)	3 (6.7)	4 (8.5)	0.178
Asia/Oceania	63 (44.1)	27 (52.9)	20 (44.4)	16 (34.0)	
Europe	17 (11.9)	3 (5.9)	3 (6.7)	11 (23.4)	
Middle East	16 (11.2)	7 (13.7)	7 (15.6)	2 (4.3)	
North America	15 (10.5)	4 (7.8)	5 (11.1)	6 (12.8)	
South America	22 (15.4)	7 (13.7)	7 (15.6)	8 (17.0)	
Number of students					
< 500	47 (32.9)	20 (39.2)	15 (33.3)	12 (25.5)	0.764
501–1000	55 (38.5)	18 (35.3)	18 (40.0)	19 (40.4)	
1001–5000	38 (26.5)	13 (25.5)	11 (24.4)	14 (29.8)	
Missing data	3 (2.1)	0 (0)	1 (2.2)	2 (4.3)	
Occupation of respondent					
Teacher	123(86.0)	45 (88.2)	40 (88.9)	38 (80.9)	0.533
Administrator	16 (11.2)	4 (7.8)	5 (11.1)	7 (14.9)	
Student	4 (2.8)	2 (3.9)	0 (0)	2 (4.3)	
SRHR exists as specific topic					
No	54 (37.8)	37 (72.6)	14 (31.1)	3 (6.4)	<0.001
Do not know	15 (10.5)	5 (9.8)	5 (11.1)	5 (10.6)	
Yes	74 (51.7)	9 (17.6)	26 (57.8)	39 (83.0)	
SRHR has appointed teachers					
No	83 (58.0)	43 (84.3)	23 (51.1)	17 (36.2)	<0.001
Do not know	15 (10.5)	5 (9.8)	3 (6.7)	7 (14.9)	
Yes	45 (31.5)	3 (5.9)	19 (42.2)	23 (48.9)	
Hours specifically allotted to SRHR					
< 9 h	85 (59.4)	38 (74.5)	28 (62.2)	19 (40.4)	<0.001
10–19 h	36 (25.2)	5 (9.8)	13 (28.9)	18 (38.3)	
≥ 20 h	12 (8.4)	0 (0)	2 (4.4)	10 (21.3)	
Do not know	10 (7.0)	8 (15.7)	2 (4.4)	0 (0)	

Abbreviation: SRHR, sexual and reproductive health and rights (SRHR topic score is sum of SRHR topics in curriculum where topic included = 2 points, topic possibly included = 1 point, and topic not included = 0 points. "Low" = bottom tertile of total scores, "Middle" = middle tertile of total scores, "High" = top tertile of total scores).

[a]Values are presented as number (percentage).

[b]χ^2 test.

Perceived need for SRHR topics in medical curricula

Most respondents described the teaching of SRHR as something the academic and medical community should do to generate change and advance women's rights. One teacher expressed this as follows:

"I consider it vital and important the prioritization of these issues from the first steps in our career to change repeated cycles and create more consciousness in our future professionals".

A request for more knowledge in this field was expressed by the few students who answered the questionnaire, as the following quote exemplifies:

"To actually teach openly what is what and how it's done. I mean everything openly in the classroom. Most things that we know are from the internet. We are only taught those topics that are present in forensic medicine or gynecology. We never really had any separate class on sexual health and how it works. The myths and truths. Never taught about sexuality (in fact one of the teachers still considers it to be illegal)."

Many respondents wrote that the fact that SRHR translates across all medical disciplines should make it a core part of the undergraduate medical program. One teacher expressed this as follows:

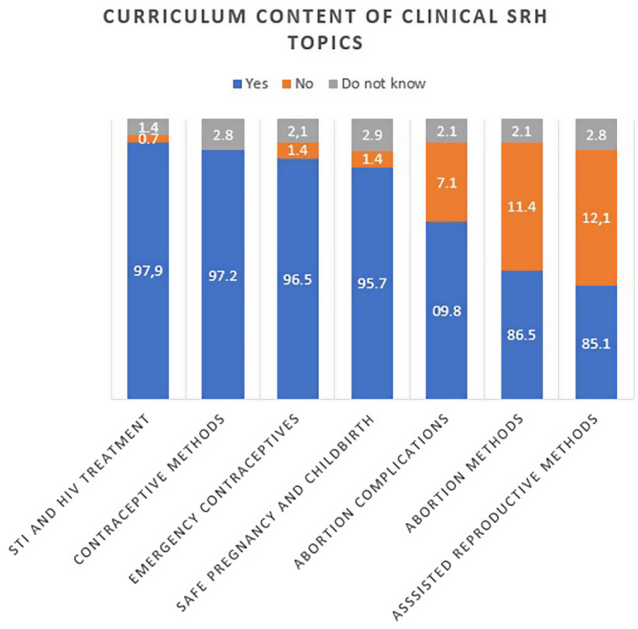

FIGURE 1 Proportion of universities that include clinical sexual reproductive health and rights (SRHR) topics in their medical undergraduate curricula according to respondents to a global survey ($n = 143$).

"This (content) is a wider, more accurate and comprehensive view of health and disease. A curriculum without these topics is woefully incomplete."

Risks and challenges entailed in teaching SRHR

A few respondents considered that the topics were unsuitable and ill-adapted to the national context as the following quote exemplifies:

"There are some issues that are not acceptable culturally and in the national interests."

Some respondents voiced concern that the complexity of SRHR topics made them difficult to teach in an objective manner. One teacher expressed this as follows:

"There is a high risk that (teaching) becomes academic activism instead of being fact-based and empirically driven."

Feasibility and the best approach to teaching SRHR

Despite barriers, most respondents considered it feasible to include SRHR topics, exemplified by the following quote:

"We have spent a great deal of time creating curriculum on these topics. We would be happy to share. It was not easy, as we had to push back against misogyny even within our own institution. However, we did it."

Several respondents argued that SRHR issues should permeate the whole curriculum and be introduced before university level, as the following quote exemplifies:

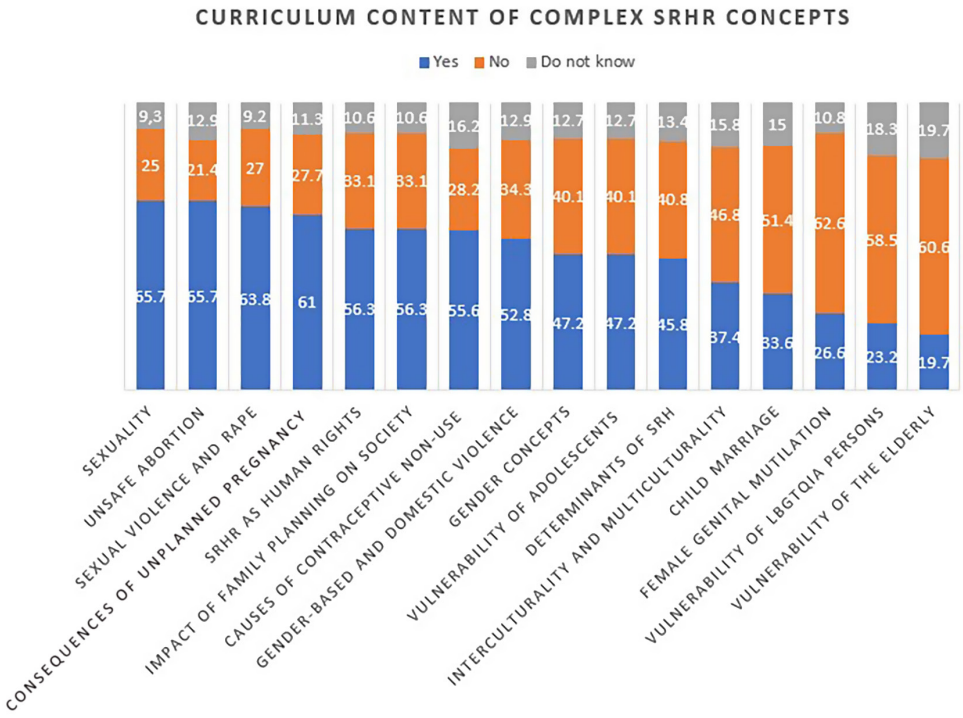

FIGURE 2 Proportion of universities that include complex sexual reproductive health and rights (SRHR) topics in their medical undergraduate curricula according to respondents to a global survey ($n = 143$).

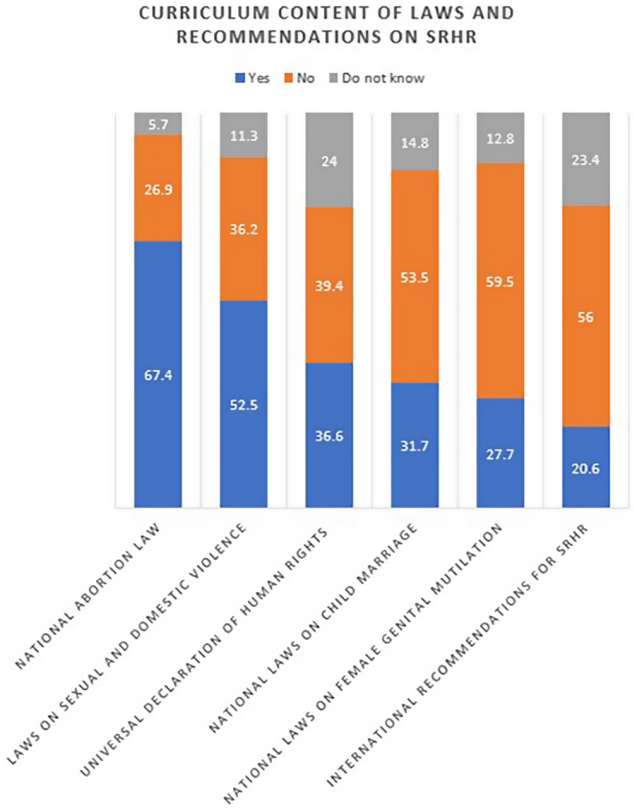

FIGURE 3 Proportion of universities that include laws and policies related to sexual reproductive health and rights (SRHR) topics in their medical undergraduate curricula according to respondents to a global survey ($n = 143$).

"There should be more hours so as to be able to treat these issues deeply according to their importance and the repercussions that they subsequently have on patient care and respect for (patient) rights." (translated from Spanish).

Some respondents cautioned that a gradual approach to introducing these topics would be best, exemplified by the following quote:

"All the sudden change from no education to full awareness and education would not be possible; rather a step-by-step approach would be feasible due to cultural constraints."

Barriers to teaching SRHR

Many respondents cited the lack of qualified teachers for SRHR as a barrier, and that lack of knowledge, stigma, and myths were also common among teachers. Two teachers described this as follows:

"I agree these are all relevant and I am embarrassed that I don't know if several are formally taught across our curriculum or not (I only know what I teach, I am in the O&G Dept). I don't even know where to look for expertise outside my department to develop course content…".

Cultural and religious taboos were some of the most cited barriers to teaching SRHR topics, as the following quote exemplifies:

"Sexual health is being considered as taboo to talk about in central Asian countries, but there are lots of problems arising from not being aware of the normal physiology."

TABLE 2 Associations between total SRHR topics included in the curriculum (SRHR score), income level and abortion legislation in the university setting

	Total SRHR score[a]		Clinical SRHR score[b]		Complex SRHR score[c]	
	Mean ± *SD*	*P*-value	Mean ± *SD*	*P*-value	Mean ± *SD*	*P*-value[d]
All universities	39.6 ± 13.8		14.7 ± 2.5		24.9 ± 12.6	
By income level[e]						
Low/low-middle	37.0 ± 13.4	ref	14.9 ± 2.2	ref	22.1 ± 13.1	ref
High middle	37.8 ± 13.2	0.771	14.3 ± 3.1	0.234	23.6 ± 11.6	0.583
High	45.4 ± 13.8	<0.003	14.8 ± 2.2	0.693	30.7 ± 12.4	0.001
By level of abortion restriction[f]						
High	37.5 ± 14.1	ref	14.4 ± 2.4	ref	23.1 ± 13.4	ref
Moderate	38.9 ± 15.7	0.721	13.5 ± 4.4	0.156	25.5 ± 12.0	0.517
Low	42.6 ± 12.6	0.042	15.3 ± 1.5	0.063	27.3 ± 12.3	0.070

Abbreviation: SRHR, sexual and reproductive health and rights.

[a]An SRHR total score is the sum of the SRHR topics in the curriculum where the topic is included = 2 points, possibly included = 1 point. and not included = 0 points.

[b]The clinical management score includes safe pregnancy and childbirth, treatment of sexually transmitted infection, contraceptive methods, emergency contraceptives, abortion methods, abortion complications, and assisted reproductive technology.

[c]The concepts and policies score includes complex SRHR concepts, SRHR violations, and international and national laws, recommendations and policies related to SRHR.

[d]Univariate linear regression.

[e]World Bank New Country Classifications by Income Level: 2021–2022. https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups.

[f]Guttmacher Institute categorization of abortion legality worldwide Categories 1–6. https://www.guttmacher.org/abortion-legality-worldwide.

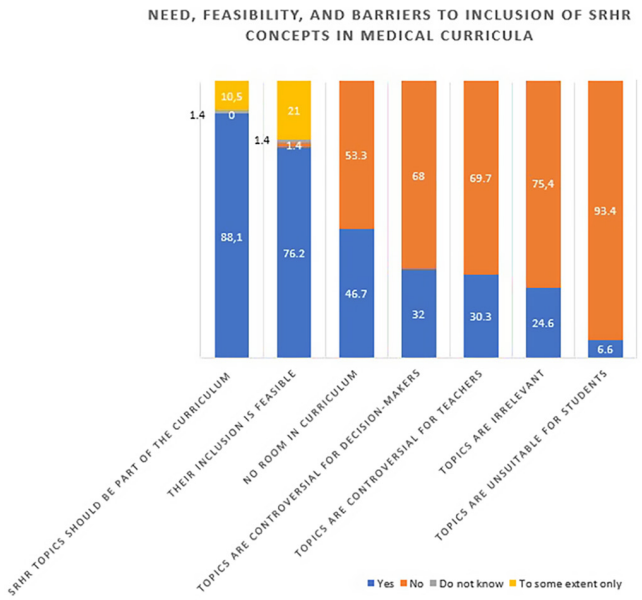

FIGURE 4 Need for, feasibility of, and perceived barriers to inclusion of comprehensive sexual reproductive health and rights (SRHR) concepts in their medical undergraduate curricula according to respondents to a global survey ($n = 143$).

Some respondents also said that teachers hesitated teaching SRHR or were afraid due to the taboos that surrounded these topics, bordering on concerns for their own safety. One respondent expressed this as follows:

"My city (…) is an underprivileged city. Due to religious and cultural taboos, we being teachers are restricted to openly discuss such topics with our students."

Patriarchal societies and low prioritization of women's rights were also common barriers cited by many respondents, exemplified by the following quote:

"In a patriarchal society, awareness of such topics is rare. Beliefs of women being inferior and objectifying them is something that is rooted deep down to the bones. So changes in curriculum with regards to such topics may not be welcomed with open arms."

Lack of political will at the administrative level to prioritize SRHR was also a commonly cited barrier to teaching SRHR, as the following quote exemplifies:

"No university cares about giving a student these types of basic knowledge because that's how the education system works. All they care about is how many students secured PG seats and how they hype their reputation. Private colleges are the worst in this aspect. So I don't think they'll even consider adding these concepts in the curriculum."

Many respondents saw an already overburdened curriculum as a barrier to including SRHR topics, exemplified as follows:

"As they are medical students their studies are already overburdened."

4 | DISCUSSION

Clinical SRHR topics were universally taught in medical schools across the study settings, whereas complex SRHR topics were more variably taught. Overall, SRHR content was associated with both income level and abortion legislation. Respondents recognized the need and urgency of teaching SRHR given their substantial societal impact and believed it to be feasible despite identifying contextual risks and barriers that would have to be mitigated to achieve this.

The present study is, to our knowledge, the first global survey among providers of medical education on what SRHR topics are included in medical education and how they perceive the need for, feasibility of, and barriers to including SRHR topics in the curriculum. The study has several limitations. The data are self-reported, so are subject to the biases and limitations in knowledge with which the respondents answered the questionnaire. The survey was chain-referred to recipients across the world and although all continents are represented, we are unable to determine the overall response rate, so the extent to which our sampling adequately and proportionally reflects our study population is unknown. Our text data were extracted based on only three questions with narrowly focused research questions, which although providing nuance to the quantitative data, are limited in the scope of the analysis. For a comprehensive understanding of the contextual factors regulating SRHR content, in-depth interviews would have been required. The survey was available in English and Spanish, language barriers may have resulted in the exclusion of some potential respondents. Our results therefore provide only an estimate of the extent to which SRHR topics are taught, the contextual variations that exist, and the barriers that exist to teaching them at medical universities.

Our results indicate that clinical SRHR topics are uncontroversial components of most curricula, supported by the lack of association to contextual factors and a low variance in clinical SRHR scores. Complex SRHR topics were however often missing from curricula. This is consistent with a Swedish report that found that topics such as sexual violence, sex for compensation, and heteronormativity were universally missing from medical curricula.[12] Our findings suggest that complex SRHR issues may be omitted from medical education to an increased degree in countries with lower income and restricted access to abortion. It was also in relation to teaching complex SRHR topics that some respondents expressed reservations. In these settings SRHR sensitization among students should be prioritized to advance gender equality and health equity.

Student attitudes to SRHR seem to influence how students go on to provide SRH services.[13] In our study, teachers and students alike cited their lack of knowledge of SRHR as an incentive, but also as a barrier to the incorporation of these topics in curricula. Previous research supports that both teachers and students are unfamiliar with SRHR concepts, particularly non-normative and social aspects of SRH.[8,14–16]

Universal access to SRHR is integral to achieving not only improved reproductive health and gender equality but also poverty reduction and reduced global inequality.[17] Non-stigmatized, accessible SRH services will develop in the joint presence of an empowered demand from the public and a recognition from providers of the value of these services. Medical education is a natural forum for sensitizing future doctors to their role in this equation. Doctors who know how the safe expression of gender identity

and sexuality influences autonomy, how child marriage affects literacy, and how informed contraceptive choice and safe abortion influence poverty reduction, are better equipped to lead reforms toward universal and equitable health services.[18–20] Our results support that SRHR topics should be integrated longitudinally in medical curricula. To achieve global reach, a universal curriculum for SRHR should be considered.

In conclusion, the results support that while complex SRHR topics are often omitted from medical curricula, teachers both support and recognize the value of comprehensive inclusion of SRHR education in medical school, and recognize context-specific barriers.

AUTHOR CONTRIBUTIONS

The idea and design for the study were developed jointly by all authors. The survey content, design, and piloting were performed by ME, TAH, MG, ARN, and HS. All authors contributed to the dissemination of the survey. The data were extracted and analyzed by ME and verified by KGD. All authors contributed to the review of the results and have approved the final version of the manuscript.

FUNDING INFORMATION

The study received no funding and was performed within the non-remunerated collaboration of the FIGO Committee for Human Rights, Refugees and Violence Against Women.

CONFLICT OF INTEREST

The authors have no conflicts of interest to report.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ORCID

Margit Endler https://orcid.org/0000-0003-0164-6455

REFERENCES

1. Pugh S. Politics, power, and sexual and reproductive health and rights: impacts and opportunities. *Sexual and Reproductive Health Matters*. 2019;27(2):1-5.
2. Understanding the Links Between Sexual and Reproductive Health Status and Poverty Reduction. UNFPA Policy Briefs. UNFPA, McGill University, National University of Ireland, Galway. 2014. https://www.mcgill.ca/isid/files/isid/pb_2012_18_oxhorn.pdf. Accessed December 5th 2021.
3. Call to Action to the Global Community. Attaining universal health coverage through sexual and reproductive health and rights and HIV linkages. July 23rd 2018. https://www.who.int/reproductivehealth/topics/linkages/en/. Accesses 5th December 2021.
4. The Guttmacher-Lancet Commission. Accelerate progress—sexual and reproductive health and rights for all: report of the Guttmacher–lancet commission. Executive summary. *The Lancet*. 2018;391(10140):2642-2692.
5. Hepburn JS, Mohamed IS, Ekman B, Sundewall J. Review of the inclusion of SRHR interventions in essential packages of health services in low- and lower-middle income countries. *Sex Reprod Health Matters*. 2021;29(1):1985826.
6. Goldfarb ES, Lieberman LD. Three decades of research: the case for comprehensive sex education. *J Adolesc Health*. 2021;68(1):13-27.
7. Areskoug-Josefsson K, Schindele AC, Deogan C, Lindroth M. Education for sexual and reproductive health and rights (SRHR): a mapping of SRHR-related content in higher education in health care, police, law and social work in Sweden. *Sex Educ*. 2019;19(6):720-729.
8. Coleman E, Elders J, Satcher D, et al. Summit on medical school education in sexual health: report of an expert consultation. *J Sex Med*. 2013;10(4):924-938.
9. New World Bank country classifications by income level: 2021-2022. World Bank Country and Lending Groups. July 1st 2021. https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups. Accessed December 13th 2021
10. Bearak J, Popinchalk A, Ganatra B, et al. Unintended pregnancy and abortion by income, region, and the legal status of abortion: estimates from a comprehensive model for 1990-2019. *Lancet Glob Health*. 2020;8(9):e1152-e1161.
11. Guttmacher Institute. Abortion legality worldwide. December 2017. https://www.guttmacher.org/abortion-legality-worldwide. Accessed December 13th 2021.
12. The Public Health Agency of Sweden. A study mapping HIV prevention and sexual and reproductive health and rights (SRHR) content in health- and police- higher education in Sweden. Folkhälsomyndigheten 2017. 04331-2017-1.
13. Bhavsar V, Bhugra D. Cultural factors and sexual dysfunction in clinical practice. *Adv Psychiatr Treat*. 2013;19(2):144-152.
14. Komlenac N, Siller H, Hochleitner M. Medical students indicate the need for increased sexuality education at an Austrian medical university. *Sex Med*. 2019;7(3):318-325.
15. Provenzano-Castro B, Oizerovich S, Stray-Pedersen B. Health care students at an Argentinean school of medicine: are they well prepared to provide quality sexual and reproductive health services? *Eur J Contracept Reprod Health Care*. 2017;22(3):233-241.
16. Rufino AC, Madeiro A, Girão MJ. Sexuality education in Brazilian medical schools. *J Sex Med*. 2014;11(5):1110-1117.
17. *The Sustainable Development Goals*, United Nations. 2015. https://sustainabledevelopment.un.org/?menu=1300. Accessed on 12th March 2021.
18. Millennium Project, U. *UN Millennium Development Library: Taking Action: Achieving Gender Equality and Empowering Women*. 1st ed. Routledge; 2005.
19. Nguyen MC, World Bank Out of school children initiative. Impact of Child Marriage on Literacy and Education Attainment in Africa. Unicef and Unesco. http://ais.volumesquared.com/wp-content/uploads/2015/02/OOSC-2014-QW-Child-Marriage-final.pdf. 2014
20. Razavi S. The 2030 agenda: challenges of implementation to attain gender equality and women's rights. *Gender & Development*. 2016;24(1):25-41.

How to cite this article: Endler M, Al-Haidari T, Benedetto C, et al. Are sexual and reproductive health and rights taught in medical school? Results from a global survey. *Int J Gynecol Obstet*. 2022;159:735-742. doi: 10.1002/ijgo.14339