Knowledge and perception of medical students on legal abortion

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Abstract

Abortion is a frequent practice in Brazil and a major cause of maternal mortality. Even under legal conditions, women face many barriers to access the procedure, often related to physicians’ unfamiliarity with the legislation. This article assess the knowledge of medical students from Faculdade de Medicina da Bahia of Universidade Federal da Bahia about the laws that regulate abortion in Brazil and their perception on the topic. This qualitative cross-sectional study analyzed data collected from a questionnaire answered by 237 students. Although the participants showed adequate theoretical knowledge of legal aspects, discrepant and incorrect answers were observed when asked about law enforcement in situations of legal abortion care, showing that education focused on the topic is required using multidisciplinary and transversal discussions during the medical course. Finally, we observed that participants tended to favor decriminalization of abortion.


Resumo

Conhecimento e percepção de estudantes de medicina sobre abortamento legal

O abortamento é uma prática frequente no Brasil e uma importante causa de mortalidade materna. Mesmo em condições legais, as mulheres enfrentam diversas barreiras para acessar o procedimento, muitas vezes em decorrência do desconhecimento de médicos acerca dos marcos regulatórios. Este artigo objetiva avaliar o conhecimento de alunos da Faculdade de Medicina da Bahia da Universidade Federal da Bahia sobre as leis que permitem o aborto no Brasil, bem como a percepção desses estudantes sobre o tema. Trata-se de estudo de corte transversal com análise qualitativa de dados obtidos pela aplicação de questionário a 237 estudantes. Apesar de os participantes demonstrarem conhecimento teórico adequado dos aspectos legais, houve incongruências e erros quando questionados sobre aplicação das leis em situações práticas de atendimento ao aborto legal. Os resultados demonstram a necessidade de fortalecer a abordagem do tema durante a graduação, de modo multidisciplinar e transversal. Vale ressaltar, por fim, que se observou entre os participantes inclinação favorável à descriminalização do aborto.


Resumen

Conocimiento y percepción de estudiantes de medicina sobre el aborto legal

El aborto es una práctica frecuente en Brasil y una importante causa de mortalidad materna. Incluso cuando cumplen con las condiciones legales, las mujeres enfrentan varias barreras para acceder al procedimiento, a menudo debido a la falta de conocimiento de los médicos sobre los marcos regulatorios. Este artículo tiene como objetivo evaluar el conocimiento de los estudiantes de la Facultad de Medicina de la Universidad Federal de Bahía sobre las leyes que permiten el aborto en Brasil, así como la percepción de estos estudiantes sobre el tema. Se trata de un estudio transversal con análisis cualitativo de datos obtenidos mediante la aplicación de un cuestionario a 237 alumnos. Si bien los participantes demostraron un conocimiento teórico adecuado de los aspectos legales, hubo inconsistencias y errores cuando se les preguntó sobre la aplicación de las leyes en situaciones prácticas de atención al aborto legal. Los resultados demuestran la necesidad de fortalecer la enseñanza de la temática durante la graduación, de manera multidisciplinar y transversal. Finalmente, cabe mencionar que los participantes mostraron una inclinación favorable hacia la despenalización del aborto.


Declaram não haver conflito de interesse.

Approval CEP-UFBA 2.406.450
According to the technical literature, “abortion” means interruption of pregnancy until the 20th to 22nd week, with fetal weight under 500 g. Frequent practice in Brazil, abortion has major impact on the health of Brazilian women, being a major cause of maternal mortality.

Due to underreporting, it is difficult to define the actual magnitude of maternal morbidity and mortality from illegal abortion in Brazil. In general, studies use secondary data from the Brazilian National Health System (SUS) repositories, such as the Hospital Information System (SIH/SUS), Live Birth Information System, SUS Information Department, and Mortality Information System (SIM). Even with these limitations, estimates show that more than 1 million induced abortions occur in Brazil every year.

According to SIM, 77 maternal deaths from abortion were reported in 2011, or 4.8% of the total maternal deaths reported in that year. As mortality represents only one aspect of the situation, hospitalization data confirm the magnitude of the problem. A study that analyzed SIH/SUS records collected from 1996 to 2012 showed alarming data. Curettage in the abortion process is the second most common obstetric procedure in the public health system. This period showed around 240,000 admissions due to abortion complications every year, generating an annual cost of about BRL 45 million for SUS. Additionally, the annual average unsafe abortion rate was 17/1,000 at childbearing age women, at the rate of 33.2 abortions/100 live births. A study conducted in the state of Pernambuco had similar results, finding an annual average unsafe abortion rate of 36.1% of the total of live births.

Given its magnitude, morbidity and mortality rates, and the high cost on SUS, abortion must be seen and treated as a public health issue. When performed under poor conditions and without adequate professional care, it is called “unsafe abortion,” causing a higher rate of death and complications. When carried out by non-qualified health professionals or third parties, the procedure becomes a risk factor for iatrogenic physical injuries, such as perforation of the uterus and attachments, infection, and hemorrhage. Another important risk is the potential worsening of the woman’s psychological health during all stages of the procedure.

Safe abortion, in turn, is a legal procedure offered by a structured health service by a trained multidisciplinary team with all the necessary care to patients. Article 124 of the Brazilian Penal Code considers a crime against life to induce abortion in one’s own body or to consent to it, describing the penalties until article 127. Article 128 specifies that necessary abortion should not be penalized, that is, when it is the only option to save a woman’s life or when the pregnancy results from rape, if the woman agrees with the procedure and it is conducted by a trained physician.

According to Anjos and collaborators, in 2012 the Federal Supreme Court in Brazil ruled that women with anencephalic fetuses also have the right to abortion. The Federal Council of Medicine published at the time a resolution describing the diagnosis of anencephaly for these cases of therapeutic anticipation of childbirth. But abortion due to anomalies incompatible with life is not yet allowed by law. Since the 1980s, Brazilian women have resorted to the courts to obtain the right to an abortion in these cases, and most of them have been authorized to proceed.

In 2013, according to Balogh, the Federal Council of Medicine submitted a proposal to the National Congress committee responsible for the Penal Code reform, defending women’s autonomy to decide whether to proceed with pregnancy until the 12th week. But so far, this proposal has not been analyzed at the legislative level.

In practice, hospitals tend to do the procedure when the pregnant woman is at risk of death, but not in the case of abortion due to sexual violence. Rape victims often suffer institutional violence, as seen in the delay or refusal to provide care, difficult access or even acts of explicit discrimination. Because they are not aware of their rights or do not know the institutions that offer care, many of these women do not even access this service.

A study that assessed abortion experiences found that the relationship with the health team is based on distrust and fear of mistreatment, scenario that delays the search for medical care...
and generates tension during hospitalization.\textsuperscript{14} Another research identified some of the reasons that explain the low demand for legal abortion: emergency contraception obtained by the victims themselves, lack of knowledge of public institutions that offer the service in legal situations, and underreported sexual violence due to cultural and institutional obstacles.\textsuperscript{15}

Denial of care to a victim of sexual violence is considered an omission, and the physician can be civilly and criminally penalized for death or physical and psychological damage caused to the victim, according to article 135 of the Penal Code.\textsuperscript{8,13} In pregnancy resulting from rape, the health team must inform the victim about her right to terminate the pregnancy, identify her desire to do so or, when the decision is to carry to term, explain about prenatal care, possibility of keeping the child or giving the baby for adoption, etc.\textsuperscript{13}

Moreover, physicians may claim conscientious objection to refuse to do the procedure – device created to preserve their integrity in cases of moral conflict, allowing them to not carry out procedures they consider contrary to their values. This right, however, is not recognized when no other physician is available to do the abortion, or when there is a risk of death or damage to the pregnant woman’s health due to the omission.\textsuperscript{16,17} At the moment immediately after the violence, given the serious health risks to the victim, the doctor cannot use this claim nor demand a police report or a report from the Forensic Medicine Institute. As such requirements have no legal basis, they may be considered an illicit and unethical conduct.\textsuperscript{13}

The Penal Code\textsuperscript{8} does not require any document for abortion in cases of sexual violence, as the victim has no legal obligation to report the crime to the police; her statement is presumed to be true, and physicians may not contest it.\textsuperscript{13} Ordinance 1,508/2005 of the Ministry of Health regulates the “Procedures for Justification and Authorization to Interrupt Pregnancy,” a set of five instruments that must be used in the service in cases of abortion in pregnancies from rape.\textsuperscript{13} Physicians should not fear lawsuits if later no relation is found with sexual violence, as physicians are safeguarded by article 20 of the Penal Code.\textsuperscript{8} If the service followed all procedure precautions, only the woman will respond criminally in this case,\textsuperscript{13} with a penalty of one to three years in prison.

According to article 154 of the Penal Code,\textsuperscript{8} physicians are not allowed to reveal, without an acceptable reason, any information they received in their practice and that may cause harm to someone. It means that maintaining confidentiality about induced abortion is an ethical and legal duty, so physicians are not obliged to report the patient to the authorities. Failure to observe this rule can lead physicians to respond to criminal and ethical-professional lawsuits for any damage caused to the patient.\textsuperscript{1,8,9}

Doctors may act improperly due to poor knowledge of abortion legislation, causing health risks to the patient. The situation is further aggravated when the professional fears being morally judged or involved in a criminal prosecution.\textsuperscript{19} For this reason, and because it is a public health issue, besides being a right provided by law, it is important to discuss the legislation that regulates abortion in medical schools, as well as ethical and legal aspects and their practical application.\textsuperscript{20}

This study evaluates the knowledge and perception of medical students about the Brazilian legislation on abortion. The results obtained here can contribute to developing strategies to expand training on this topic, to promote ethical awareness among professionals and humanized quality care for women undergoing this delicate and difficult process.

**Method**

This is a qualitative, descriptive, cross-sectional study, with non-probability sampling. Students from all semesters (training stages) of the Bahia Medical School at Universidade Federal da Bahia (FMB-UFBA) voluntarily answered a structured and self-administered questionnaire. This instrument was developed using Google Forms and sent by email to all students enrolled in the second semester of 2017. Four emails were sent, respecting a minimum interval of seven days between them, from January to March 2018.
The questionnaires could be answered at any time and in any place chosen by the interviewee, with an average duration of 20 minutes. The body of the email included an informed consent form and, if the student agreed to participate in the study, he could access the questions by clicking the link provided. To maintain data confidentiality, the respondent identification was not required in the questionnaire.

No sample size calculation was performed, since the questionnaire was sent to all FMB-UFBA students. The sample included 237 students who agreed to answer the questionnaire. As there were 1,022 students actively enrolled in the second academic semester of 2017, the sample corresponded to 23.2% of the total population. Of all 237 participants, 16 (6.8%) were in the 1st semester, 38 (16%) in the 2nd semester, 11 (4.6%) in the 3rd semester, 18 (7.6%) in the 4th semester, 17 (7.2%) in the 5th semester, 38 (16%) in the 6th semester, 16 (6.8%) in the 7th semester, 18 (7.6%) in the 8th semester, 23 (9.7%) in the 9th semester, 20 (8.4%) in the 10th semester, 7 (3%) in 11th semester, 13 (5.5%) in the 12th semester, and 2 (0.8%) did not provide this information.

The questionnaire contained only objective questions and was adapted from two previous studies with physicians and other health professionals. In total, it had 22 questions divided into four sections (see Appendix). The first section collected sociodemographic data, including age, gender, marital status, religion, family income, and racial group. The second section addressed the students’ general knowledge on abortion through statements that should be identified as true or false; it also identified which curriculum components the student had studied in academic activities on the topic. The third section addressed specific aspects of the legislation on abortion in Brazil with multiple choice and closed-ended questions. Finally, the fourth section assessed the student’s perception about abortion. Data were organized and analyzed using Microsoft Excel.

Results

Sociodemographic characterization

In total, 237 students answered the questionnaire. Most were female (61.2%), between 19 and 22 years old (41.1%), single (91.1%), brown (48.7%), with family income between 5 and 10 minimum wages (26.7%), Catholic (25%) or without religion (25%). Students from all semesters answered the questionnaire, with a predominance of those in the sixth semester (16%).

General knowledge about abortion

Table 1 shows the statements and respective true (T) and false (F) answers, as well as absolute numbers and percentages of students who provided a “true” or “false” answer. Although most students correctly classified abortion statements, many were unaware that abortion is a major cause of maternal deaths in developing countries (24.9%) and that repeated abortion procedures may pose risks for future pregnancies (30%).

Regarding the profile of women who have abortions, 21.1% of students mistakenly answered that the women who most frequently resort to abortion in Brazil usually have exceeded the desired number of children, and 23.2% were unaware that most of these women are young. Most participants (87.8%) agree that reproductive planning helps prevent induced abortion. Almost all students believe abortion is a public health issue (96.2%) and disagree the access to reproductive planning is adequate in Brazil (98.3%). Finally, 62% of students considered that abortion should not be used as a reproductive planning method.
Knowledge and perception of medical students on legal abortion

Table 1. General knowledge about abortion

<table>
<thead>
<tr>
<th>Statements</th>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>In developing countries, abortion is a major cause of maternal deaths. (T)</td>
<td>178</td>
<td>59</td>
</tr>
<tr>
<td>Repeated abortion with dilation and curettage can pose risks for future pregnancies. (T)</td>
<td>166</td>
<td>71</td>
</tr>
<tr>
<td>Women who resort to abortion in Brazil usually have exceeded the desired number of children. (F)</td>
<td>50</td>
<td>187</td>
</tr>
<tr>
<td>Most women who resort to abortion in Brazil are young. (T)</td>
<td>182</td>
<td>55</td>
</tr>
<tr>
<td>Efficient access to family planning helps prevent induced abortion. (T)</td>
<td>208</td>
<td>29</td>
</tr>
<tr>
<td>Abortion is a public health issue. (T)</td>
<td>228</td>
<td>9</td>
</tr>
<tr>
<td>Access to family planning promoted in Brazil is adequate. (F)</td>
<td>4</td>
<td>233</td>
</tr>
<tr>
<td>Abortion should not be used as a family planning method. (T)</td>
<td>147</td>
<td>90</td>
</tr>
</tbody>
</table>

T: true; F: false

Knowledge of abortion legislation

Table 2 shows statements about legal aspects of abortion in Brazil with their respective answers, as well as absolute numbers and percentages of students who answered each statement as “true” or “false”. Regarding the provisions in the Penal Code, 92% of the students knew that a physician performing an abortion procedure is not punished when the pregnant woman is at risk of death, 94.9% were aware that no punishment is applied when a pregnancy results from rape, and 91.1% recognized that no punishment is applied in cases of diagnosis of anencephaly or brain anomalies incompatible with extrauterine life. However, 28.3% of students were unaware that abortion is punished when the pregnant woman’s health is not at risk. Only 1.7% of students thought that abortion is not punished when the pregnant woman is a minor, and 0.8% thought abortion is not punished when the woman does not wish to have the child.

Almost all students (98.3%) knew legal abortion does not require the husband’s consent. Smaller percentages knew that a police report (80.3%) or a report from the Forensic Medicine Institute (82.9%) is not needed. Almost 24% were unaware that no document is necessary, only the woman’s testimony.

Regarding the physician’s attitude in case of suspected illegal abortion, only 51.5% of students knew that, excepting an acceptable cause, it cannot be reported, and 89.6% were aware that it should not be reported to the police; however, 38.5% believe that it should not be reported at all. As for recording suspected illegal abortion, 69.9% of the interviewees knew that the procedure must be properly recorded for suitable handling of the case. However, 27.5% mistakenly believed that suspected illegal abortion should not be noted in medical records, as the information is confidential, and 4.2% thought medical records should include the information to support case reporting.

Regarding conscientious objection, 86.8% of students knew it is a professional right, but that cannot be claimed on any situation, and 74.8% were aware that, in situations of legal abortion, this device cannot be used in the absence of another physician to do the procedure. Only 30.3% knew that the right to conscientious objection does not apply in case of complications resulting from unsafe abortion, and only 50% knew that this right cannot be claimed when abortion should be performed due to the woman’s risk of death.
Table 2. Knowledge of abortion legislation

<table>
<thead>
<tr>
<th>Statements</th>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>According to article 128 of the Brazilian Penal Code and a decision of the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal Supreme Court of 2012, abortion performed by a physician is not</td>
<td></td>
<td></td>
</tr>
<tr>
<td>punished when:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The pregnant woman is at risk of death. (T)</td>
<td>218</td>
<td>92.0</td>
</tr>
<tr>
<td>Pregnancy results from rape. (T)</td>
<td>225</td>
<td>94.9</td>
</tr>
<tr>
<td>The pregnant woman is a minor. (F)</td>
<td>4</td>
<td>1.7</td>
</tr>
<tr>
<td>The woman does not want to have a child. (F)</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>There is a risk for the health of the pregnant woman. (F)</td>
<td>67</td>
<td>28.3</td>
</tr>
<tr>
<td>In cases of fetus with cerebral anomalies incompatible with extraterine</td>
<td>216</td>
<td>91.1</td>
</tr>
<tr>
<td>life. (T)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal abortion requires:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A police report. (F)</td>
<td>46</td>
<td>19.7</td>
</tr>
<tr>
<td>A report from the Forensic Medicine Institute. (F)</td>
<td>40</td>
<td>17.1</td>
</tr>
<tr>
<td>The husband’s consent. (F)</td>
<td>4</td>
<td>1.7</td>
</tr>
<tr>
<td>No document is required, only the woman’s testimony. (T)</td>
<td>178</td>
<td>76.1</td>
</tr>
<tr>
<td>b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Must report it to the police. (F)</td>
<td>24</td>
<td>10.4</td>
</tr>
<tr>
<td>Should not report it in any way. (F)</td>
<td>89</td>
<td>38.5</td>
</tr>
<tr>
<td>Cannot report it, except for an acceptable reason. (T)</td>
<td>119</td>
<td>51.5</td>
</tr>
<tr>
<td>c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Should suspected illegal abortion be registered in the medical records?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes, because records are necessary to report the case. (F)</td>
<td>10</td>
<td>4.2</td>
</tr>
<tr>
<td>No, because it is confidential information. (F)</td>
<td>65</td>
<td>27.5</td>
</tr>
<tr>
<td>Yes, because records support proper care provision and handling of the</td>
<td>165</td>
<td>69.9</td>
</tr>
<tr>
<td>case. (T)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>About the right to conscientious objection:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physicians have the right to conscientious objection, which can be claimed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>at any time. (F)</td>
<td>31</td>
<td>13.2</td>
</tr>
<tr>
<td>The right to conscientious objection does not apply if abortion is</td>
<td></td>
<td></td>
</tr>
<tr>
<td>required due to woman’s risk of death. (T)</td>
<td>117</td>
<td>50.0</td>
</tr>
<tr>
<td>The right to conscientious objection does not apply in case of a legal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>abortion in the absence of another physician to perform it. (T)</td>
<td>175</td>
<td>74.8</td>
</tr>
<tr>
<td>The right to conscientious objection does not apply in case of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>complications resulting from unsafe abortion. (T)</td>
<td>71</td>
<td>30.3</td>
</tr>
</tbody>
</table>

T: true; F: false; *some statements were not answered by all participants; *234 answers; **231 answers; ***236 answers

Students’ perception about abortion

Most students were in favor of abortion in different situations, particularly those circumstances provided by law – rape (93.7%), risk of death (92.8%), and brain anomalies incompatible with life (91.1%). Significant percentages supported the procedure when there is a health risk (70.5%), when the woman does not wish to have the child (69.2%), if the woman faces socioeconomic issues (60.3%), in case of adolescent pregnancy (54.4%), and anomalies incompatible with life (51.5%). Only 2.5% of respondents answered they were against abortion in any situation.
Knowledge and perception of medical students on legal abortion

For 74.7% of students, the abortion law should be changed. About 65% believe abortion should be fully decriminalized, while 56.7% agree that the law should include more circumstances in which abortion is legal. But only 38.6% reported they would do it professionally in the event of decriminalization: 81.1% think physicians who practice illegal abortion should not be punished; 85.8% would not denounce physicians for such practice; and 80.7% do not consider recommending abortive medication as a crime, if no written prescription is provided.

In a hypothetical situation where an obstetrician is asked to do an illegal abortion, 93.6% agreed that the physician should clarify the problem to the patient; 25.1% believed that the physician should fulfill the patient’s request; and 20.4% said the physician should try to change the woman’s decision. Only 5.5% think the physician should recommend another professional, and 5.1% that the obstetrician should recommend an abortive medicine.

When asked about the possibility of doing an abortion in their professional careers, 94.5% stated they would adopt an approach to support the woman’s feelings. No student reported they would feel angry with the patient, but 1.3% reported disapproval of abortion, and 0.4% said they would keep contact with the woman to a minimum. Finally, 54.7% believe that criminalizing abortion creates difficult and delicate situations for physicians.

For 81% of students, doctors who perform legal abortion should have specific qualifications; 57.9% report they would work in a reference service for legal abortion or any other that do the procedure. Only 40.7% know the reference center that do legal abortion in the city of Salvador, Bahia.

Discussion

General knowledge about abortion

Most students showed satisfactory general knowledge on this topic, providing correct answers to most statements. The result was similar to that found in a study with emergency physician assistants in gynecology and obstetrics 20. The aspects with higher error rates refer to the impact on maternal mortality, complications for future pregnancies, profile of women who have abortions, and use of abortion as a family planning method. This shows a lack of knowledge on the epidemiology of abortion and its impact on public health and women’s health, as well as perpetuating the stereotypes about women who have abortions.

Knowledge of abortion legislation

Participants showed good knowledge about the situations of abortion permitted by law: more than 90% answered right about the three circumstances that do not constitute a crime. A review published in 2013 analyzed Brazilian studies published from 2001 to 2011 on knowledge and behaviors of health professionals regarding abortion and also found adequate knowledge of legal situations 22. The same result was found in a study involving medical students in Rio Grande do Norte, with over 90% of students providing correct answers 23. However, in a research conducted in a public university in the state of São Paulo, only about half of participants provided correct answers to all questions related to this topic 19; a research on anencephaly with physicians from Goiânia found that only 44.3% knew that a physician can perform therapeutic anticipation of childbirth without the authorization of the State 24.

The higher error rate found in our study was related to the health risk for pregnant women, as 28.3% of students mistakenly believed that abortion can be done in this case without punishment; another study obtained similar results (20.9%) 23. On the other hand, the most frequent error found in the literature refers to the belief that abortion is legal in any case of severe malformation of the fetus 19,25. This mistake probably occurs due to the frequent court authorizations in such cases, but, excepting anencephaly, these situations are not allowed by law 25. Such misconception may have not been so prevalent among the students in our study because the questionnaire listed only brain anomalies incompatible with extrauterine life.

Regarding the documents required in cases of rape, most students are aware that no police report or a report from the Forensic Medicine
Institute is necessary; however, a significant number of students (23.9%) are unaware that the woman's testimony is sufficient. This seems to be a recurrent issue in medical training, for several studies show a negative impact on professional practice due to lack of knowledge of legal provisions. A study with students also found a gap in this content and highlighted insufficient attention to the topic during medical training. Such poor knowledge can lead to obstacles in patient care.

Other deficiencies were observed in the knowledge about provisions of the Brazilian Penal Code and the Code of Medical Ethics, for instance, regarding confidentiality, the possibility of case reporting, and inclusion of induced abortion in medical records. These gaps seem to be common among physicians. Although most participants in this study were aware of the limitations of conscientious objection, students had difficulty identifying practical situations in which this right cannot be exercised.

In general, the population studied knows the legal aspects of abortion, but do not know when and how to apply it. This result may indicate a lack of dialogue between curriculum components, that is, the theoretical content learned in ethical-humanistic disciplines does not match or is not reinforced in the disciplines that specifically address training for medical practice. Expanding the insertion of abortion-related topics in the curricular components of clinical and surgical specialties, in gynecology and obstetrics, through discussions about clinical cases, problem situations and, above all, women’s care, can contribute to proper training of students.

Students’ personal opinions about abortion

Most students agree with abortion in situations already provided by law, corroborating the opinion of doctors found in other studies. We also observed a favorable opinion in other circumstances: about two-thirds of students support abortion when there is a risk for the pregnant woman's health, when pregnancy is unwanted, and if the woman faces socioeconomic issues. Just over half agree with the procedure in cases of adolescent pregnancy and fetal anomaly compatible with life.

This profile contrasted with that of private college students, also in Salvador, Bahia, whose agreement was 27% for any case of anomaly, and 29.9% for voluntary termination of pregnancy. This contrast may be due to differences in socioeconomic profile and workload dedicated to medical ethics. In a literature review of studies with physicians, Cacique, Passini Junior and Osis observed more similar results, with two studies showing approvals of 61.4% and 47.4% for health risk for pregnant women and percentages below 50% for other situations.

Regarding regulations, most participants believe that the legislation should be changed, and around two-thirds believe abortion should be fully decriminalized. More than 80% of the students believe that doctors who do illegal abortion should not be punished nor reported. Moreover, one out of four students believes that when an illegal abortion is requested, the physician must fulfill such request.

Such defense for including more circumstances in which abortion is legal and more permissive conducts differ from data found in the literature, suggesting a possible selection bias in our study. Since the issue involves taboos and prejudices, students with more liberal ideas and who are interested in the topic were probably more willing to answer the questionnaire.

An interesting fact is that, despite the more permissive profile, only 38.6% declared that in their future professional practice they would do the procedure if abortion was decriminalized, which shows a certain contradiction. This situation converges with the literature, which reports a tendency to increase the number of conscientious objection claims. A survey with students from medical schools in Piauí showed high rates: 13.2% of the participants would refuse to do abortions in case of risk of death for the pregnant woman; 31.6% in cases of anencephaly; and 50.8% in pregnancy from rape. A more serious aspect is that a significant number of these students would not recommend another physician for women seeking care, nor would they advise women about all possibilities to do abortion. The rates of conscientious objection are almost twice higher in situations of rape. These results show the impact that physicians’ moral and personal beliefs have.
on women’s health, which perhaps explains the discrepancy in students’ opinions and projections of future practice – a discrepancy also found in another study. Professionals should not be required to do something they do not agree with, but physicians must be aware of their duty to ensure and facilitate access to refused treatment. A claim of conscientious objection must be ethically justified, and not become a strategy to hide prejudices or fear of lawsuits and moral accusations. Such instrument cannot be an obstacle for women to have access to abortion. In this sense, 57.9% of the interviewees stated they would work in a reference abortion center, but a considerably smaller percentage would be willing to do legal abortion.

**Final considerations**

Participants in this study showed knowledge of Brazilian legislation regarding abortion but had problems applying the law to practical situations. Such issue must be addressed in a transversal and multidisciplinary manner, in relation to clinical practice, reinforcing exemplary attitudes of professors and preceptors so that, besides respecting the law in foreseen circumstances, women arriving at a health service undergoing abortion can be treated with empathy and solidarity. Such an approach can help train professionals who will be better prepared to enforce the reproductive rights of women, an important part of the comprehensive healthcare for the female population.

On the other hand, we observed a more liberal and less discriminatory attitude among students, perhaps due to the ethical education offered by the school where this study was conducted, which offers an ethical-humanistic axis with eight curricular components that address gender issues, abortion and conscientious objection, early life, sexual and reproductive rights, female autonomy, and support to patient decision on whether or not to perform legal abortion.

The ability to understand the magnitude and scope of this social phenomenon and find solutions depends on investment in education and information, aiming at the critical training of individuals. Commitment is also required from citizens and directly involved sectors, such as the State and health professionals, always observing basic principles such as democracy, secularity of the State, gender equality, and human dignity. Humanized care in the abortion process is part of the reproductive and sexual rights of women, and ensuring it is a duty of all health professionals.

**References**

Knowledge and perception of medical students on legal abortion


Knowledge and perception of medical students on legal abortion


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Participation of the authors
Nathália Maria Fonseca Fróes designed the study, collected and analyzed the data and wrote the article. Cláudia Bacelar Batista participated as academic advisor in all phases of the study that originated the text.

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Appendix

Questionnaire adapted from Loureiro and Vieira\textsuperscript{20} and Rocha and collaborators\textsuperscript{21}

Characteristics of students

Age:
- ( ) 18 years or less
- ( ) 19 to 22 years
- ( ) 23 to 26 years
- ( ) 27 to 30 years
- ( ) Over 30 years

Gender:
- ( ) Female
- ( ) Male

Marital status:
- ( ) Single
- ( ) Married
- ( ) Consensual union

Religion:
- ( ) Catholic
- ( ) Evangelical
- ( ) Spiritualist
- ( ) Jehovah’s Witness
- ( ) Umbanda
- ( ) Buddhism
- ( ) Afro religion
- ( ) Other
- ( ) No religion
- ( ) Agnostic/atheist

Family income:
- ( ) Up to 1.5 minimum wage
- ( ) 1.5 to 3 minimum wages
- ( ) 3 to 5 minimum wages
- ( ) 5 to 10 minimum wages
- ( ) 10 to 30 minimum wages
- ( ) More than 30 minimum wages

Color:
- ( ) White
- ( ) Black
- ( ) Brown
- ( ) Indigenous
- ( ) Asian
- ( ) Other

Course semester:
- ( ) 1st Semester
- ( ) 2nd Semester
- ( ) 3rd Semester
- ( ) 4th Semester
- ( ) 5th Semester
- ( ) 6th Semester
- ( ) 7th Semester
- ( ) 8th Semester
- ( ) 9th Semester
- ( ) 10th Semester
- ( ) 11th Semester
- ( ) 12th Semester
- ( ) Not a regular student

General knowledge about abortion

Based on your knowledge, write T for true and F for false:

- In developing countries, abortion is a major cause of maternal deaths. (T)
- Repeated abortion with dilation and curettage can cause risks for future pregnancies. (T)
- Women who resort to abortion in Brazil tend to have exceeded the desired number of children. (T)
- Most women who resort to abortion in Brazil are young. (T)
- Efficient access to family planning helps prevent induced abortion. (T)
- Abortion is a public health problem. (T)
- Access to family planning promoted is adequate in Brazil. (F)
- Abortion should not be used as a family planning method. (F)

Knowledge of abortion legislation

Based on your knowledge, write T for true and F for false.

According to article 128 of the Brazilian Penal Code and a decision of the Federal Supreme Court of 2012, abortion performed by a physician is not punished when (disregard PEC 181/2015, which is still in discussion):

- The pregnant woman is at risk of death. (T)
- Pregnancy results from rape. (T)

continues...
### Knowledge of abortion legislation

Based on your knowledge, write T for true and F for false.

According to article 128 of the Brazilian Penal Code and a decision of the Federal Supreme Court of 2012, abortion performed by a physician is not punished when (disregard PEC 181/2015, which is still in discussion):

<table>
<thead>
<tr>
<th>Situation</th>
<th>T/F</th>
</tr>
</thead>
<tbody>
<tr>
<td>The pregnant woman is a minor.</td>
<td></td>
</tr>
<tr>
<td>The woman does not want to have a child.</td>
<td></td>
</tr>
<tr>
<td>There is a risk for the health of the pregnant woman.</td>
<td></td>
</tr>
<tr>
<td>In cases of fetus with cerebral anomalies incompatible with extrauterine life.</td>
<td></td>
</tr>
</tbody>
</table>

**Legal abortion requires:**

- A police report.
- A report from the Forensic Medicine Institute.
- The husband’s consent.
- No document is necessary, only the woman’s testimony

**When illegal abortion is suspected, the physician:**

- Must report it to the police.
- Should not report it in any way.
- Cannot report it, except for an acceptable reason.

**Should suspected illegal abortion be noted in the medical records?**

- Yes, because records are necessary to report the case.
- No, because it is confidential information.
- Yes, because records support proper care provision and handling of the case.

**About the right to conscientious objection:**

- Physicians have the right to conscientious objection, which can be claimed at any time.
- The right to conscientious objection does not apply if abortion is required due to woman’s risk of death.
- The right to conscientious objection does not apply in case of a legal abortion in the absence of another physician to do it.
- The right to conscientious objection does not apply in case of complications resulting from unsafe abortion.

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### Personal opinions about abortion

Check as many options you want.

**In what situations do you support induced abortion?**

- Never
- Rape
- Death risk
- Health risk
- Anomaly compatible with life
- Anomaly incompatible with life
- The woman does not want to have a child
- Socioeconomic problems
- Adolescent pregnancy

continues...
## Personal opinions about abortion

<table>
<thead>
<tr>
<th>In your opinion:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The abortion law must be changed.</td>
<td></td>
</tr>
<tr>
<td>Abortion must be fully decriminalized.</td>
<td></td>
</tr>
<tr>
<td>More circumstances in which abortion is legal should be included.</td>
<td></td>
</tr>
<tr>
<td>If abortion was decriminalized, you would do it professionally.</td>
<td></td>
</tr>
<tr>
<td>Physicians who practice illegal abortion should be punished.</td>
<td></td>
</tr>
<tr>
<td>You would report physicians who practice illegal abortion.</td>
<td></td>
</tr>
<tr>
<td>You consider recommending abortive medication as a crime, even without prescribing it.</td>
<td></td>
</tr>
</tbody>
</table>

## In the future as a health professional, if you have a case of abortion, you:

| will have the shortest possible contact time.                                    |   |
| will be close to the woman and explain about patient anxieties.                  |   |
| will feel angry with the woman.                                                 |   |
| will disapprove of the woman's decision to abort.                                |   |
| You believe illegality will create difficult situations for physicians.         |   |

## When an obstetrician receives a request for illegal abortion, he must:

| Fulfill the request.                                                             |   |
| Try to change the woman’s decision.                                             |   |
| Provide clarification about the problem.                                        |   |
| Recommend another physician.                                                    |   |
| Recommend an abortive medicine.                                                 |   |

## Would you work in a reference service for termination of pregnancy in cases permitted by law or in another service that performs abortion?

| No.                                                                            |   |
| Yes.                                                                          |   |

## Do you believe physicians who perform legal abortion should have specific qualifications?

| Yes                                                                            |   |
| No                                                                             |   |

## Do you know about the reference center for legal abortion in the city of Salvador?

| Yes                                                                            |   |
| No                                                                             |   |