BJGH Brazilian Journal of Global Health
Revista Brasileira de Saúde Global

Analysis of abortive methods and its complications within the public health system

Deborah Bruna Gomes Simoni[1*], Débora Rita Gobbi[1]

[1]Faculdade de Medicina da Universidade Santo Amaro.

ABSTRACT

OBJECTIVE

Analyze if and how these alterations in abortion methods have influenced the eventual complications experienced by women in the post-abortion period.

METHODS

For the production of this essay, a systematic review was carried out, surveying studies in the databases: Medical Literature Analysis and Retrieval (Medline); Scientific Eletronic Library Online (Scielo); Latin American and Caribbean Literature in Health Sciences (LILACS). Were included articles, notes and reviews, published in indexed periodicals, in Portuguese and English. No time limit was established.

RESULTS

It was found that, despite the fact that the dissemination of new abortifacient drugs among the population, especially low-income population, has decreased the number of hospital admissions, the rate of unsafe abortions did not show significant changes.

CONCLUSION

Throughout the study, this is attributed to the fact that the problem of abortion permeates the medical field, involving numerous stigmas and social factors that, in the same way, require a broad approach by the State and civil society.

DESCRIPTORS

Abortion, Induced abortion, Complications, Public health.

Corresponding author:
Deborah Bruna Gomes Simoni.
Faculdade de Medicina da Universidade Santo Amaro. R. Prof. Enéas de Siqueira Neto, 340 - Jardim das Imbuias, São Paulo – SP, Brasil.
Email:dbgsimoni@gmail.com
ORCID ID: https://orcid.org/0000-0003-3041-9438

INTRODUCTION

The practice of abortion - the induced elimination of the fetus before it becomes viable, weighing less than 500 grams or 20 to 22 weeks of gestation - has been recorded and debated throughout human history in different cultures, with different conceptions, motivations and abortifacient techniques. There are accounts of procedures in Chinese medical books dating back to the 27th century BC, as well as Egyptian papyri from the 16th century BC[1].

There are also mentions of bans on some aspects of this practice. The Code of Hammurabi, for example, characterized abortion performed by others as a crime; in Ancient Greece, abortion was considered illegal when it infringed on the father's right over a potential heir. However, abortion only began to be definitively condemned by society with the rise of the Christian era. In 1869, the Catholic Church's position against abortion was established with the declaration that the fetus has a soul. Throughout the nineteenth century, the practice became prohibited in several Western countries, and the prohibition lasted until the 1960s and 1970s[1,2].

In Brazil, in 1830, the Criminal Code of the Empire criminalized the practice of abortion by third parties with or without the consent of the pregnant woman. However, the practice of abortion performed by the pregnant woman herself (self-abortion) was not condemned. At the end of the nineteenth century, in the Brazilian Republic, the Penal Code of the Republic not only expanded the list of the criminal type of practice but also included the notion of necessary abortion - when the pregnancy endangers the life of the pregnant woman[3].

In 1940, the Brazilian Penal Code typified the practice of abortion as a crime against life, condemning practices carried out by third parties, with or without consent, and self-abortion. In addition, the Penal Code of 1940 increases the list of legal abortions, including cases of pregnancy resulting from rape. In 2012, the Federal Supreme Court also ruled that the interruption of pregnancy due to anencephaly was legal[3].

However, this legal restriction does not restrain the performance of abortion practices. According to the World Health Organization[4], it is estimated that in 2008 there were 22 million unsafe abortions - procedures to terminate pregnancy performed in environments that do not meet the necessary medical standards and/or by non-specialized professionals - which can cause psychological damage and physical complications, a portion of which leads to death[4].

The National Abortion Survey indicates that abortion is common among Brazilian women, but their general financial condition plays an important role in the path taken to interrupt pregnancy[5]. The literature indicates that the main group of women who resort to unsafe abortion are those with low schooling and/or young people[6,7]. Women in vulnerable situations, without resources to perform abortions in private clinics, resort to the use of misoprostol - a synthetic drug analogous to prostaglandin, obtained clandestinely and of unknown origin - and complete uterine emptying in hospitals[5,8]. According to data from the Unified Health System cited by Carvalho[9], uterine emptying - curettage - is the third most frequent surgical procedure in institutions associated with the SUS.

Although the Ministry of Health has published a guideline for abortion care, advocating humanized and quality care regardless of the framing of the abortion to be performed, the stigma associated with the practice ends up influencing the care received both in cases of complication and in cases in which curettage is necessary. According to Madeiro and Rufino[10], most women who seek this service suffer some form of institutional violence or moral judgments, and threats of denunciation to public authorities by the health team are present in most of the reported cases[9,10,11].

Carvalho et al.[9] reported that women are not necessarily treated at the first institution in which they seek help, having to move between two or more hospitals due to the lack of an indication protocol. In addition, the risk assessment carried out in the hospital environment does not guarantee the provision of priority care. This delay in care and completion of the abortion can lead to clinical complications[9].

According to Adesse et al.[12], in 2015, 117 women were hospitalized due to complications resulting from abortion. Thus, we can see how much this practice, so present in the history of society, still affects it. In this sense, the present article sought to analyze the scientific production concerning abortion and its complications. Furthermore, it aimed to evaluate the changes in abortion practices adopted by women who use the public health system and the influence of these changes on the complication rates observed in the puerperium.

METHODS

This article adopted the systematic review method. The review was guided by the question: How did the changes in the abortifacient methods used by women, users of the public health system, influence the changes in the post-abortion complications?

In the process of bibliographic survey, the following electronic databases were consulted: Medical Literature Analysis and Retrieval (MEDLINE); Scientific Electronic Library Online (Scielo); Latin American and Caribbean Health Sciences Literature (LILACS). The Boolean descriptors and operators used in the survey are detailed in Box 1. The literature review process lasted until October 2020.

Box 1. Bibliographic search: descriptors and Boolean operators.

	Search sintax
MEDLINE	tw:((“induced, abortion”) OR (“abortion” AND “induced”) OR (“induced abortion”) AND (unsafe OR illegal OR provoked OR criminal OR trends OR rates) AND (“brazil”)).
LILACS	tw:((“aborto induzido") OR (“aborto provocado”) OR ("aborto"and (induzido OR provocado)) AND (inseguro OR provocado OR ilegal OR taxas OR pesquisa) AND (brasil OR brazil)).
SCIELO	("aborto induzido") OR (“aborto" AND (induzido OR provocado)) AND ((inseguro) OR (ilegal) OR (pesquisa) OR (taxas) OR (tendência)) AND (brasil).

It was decided to include only works published in full in indexed journals as articles, notes, and reviews in Portuguese or English. No time limit was set. Studies that addressed the practice of unsafe abortions, the sociodemographic characteristics of the women who perform them, and the methods used for abortion and its consequent complications were considered eligible. Articles that did not address women in vulnerable situations and that did not address the methods used and/or post-abortion complications were excluded.

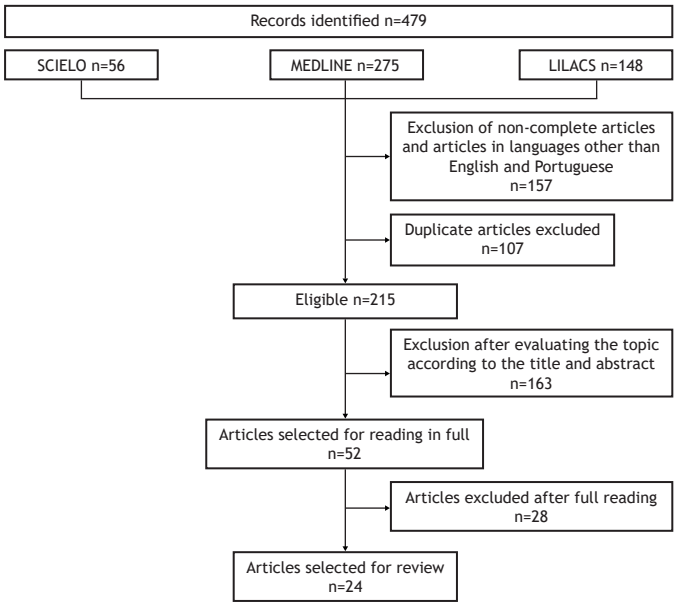
During the study selection, duplicate articles and articles that were not in Portuguese or English were excluded. After the initial screening, articles were excluded that, according to their title and abstract, were not related to the theme of the review. After a complete reading of the selected articles, new exclusions were made in order to adapt them to the thematic relevance of the study.

For data analysis, a table was constructed grouping the selected studies. This table contains the following aspects: authors, year and place of publication, study design, and results.

RESULTS AND DISCUSSION

Initially, 479 articles were identified. Of these, 264 were excluded because they were duplicate articles (157) or were not in Portuguese or English (107). Of the articles considered eligible (215), 163 were excluded after reading the title and abstract, in order to adapt the theme to the present study. After reading in full and applying the eligibility criteria, 28 studies were excluded (Figure 1).

Figure 1. Flowchart of the selection stage of the articles included in the review.



Among the twenty-four articles selected to compose the review (Box 2), four investigate cases of hospitalization due to complications, one of which was nationwide[13], and three were local studies - in São Paulo[14] and Recife[15,16]. According to Singh et al.[13], between 1992 and 2009, there was a 57% decrease in hospitalization rates for miscarriage and an even more pronounced reduction (69%) in treatment rates for severe complications.

In 1995, in the state of São Paulo, hospitalizations due to abortion accounted for 10% of obstetric hospitalizations[14]. In Recife, on the other hand, in the same period, 78.7% of the women admitted to the IMIP maternity hospital due to complications had possibly (50%) or definitely (28.7%) induced abortion[15].

In 2005, another study conducted in the same maternity hospital in Recife showed that hospitalizations due to complications accounted for about 3.1% of obstetric hospitalizations in the period[16].

In 2009, the North and Northeast regions had the highest hospitalization rates - 5.1 and 4.5 per 1000 women, respectively - while the South and Southeast regions had rates below the national average[13]. Thus, the studies showed not only a temporal difference but also a regional difference[13,14,15,16].

Box 2. Characteristics of articles on complications associated with induced abortion

Reference	Location and year	Methodology	Results
Singh et al[13]	Brasil (1992-2009)	Trend study.	Decline in the hospitalization rates for post-abortion complications (57%) and a striking decline in serious complications rates (69%).
Sorrentino e Lebrão[14]	São Paulo, Brasil (1995)	Descriptive study.	Hospitalizations due to obstetric causes accounted for 37.8% of hospitalizations in the analyzed period. In addition, the study highlighted that there is a discrepancy between the procedures performed and the reported diagnosis.
Souza et al[15]	Recife, Brasil (1994-1995)	Case-control study.	Most of the women hospitalized due to complications had possibly (50%) induced an abortion. The most commonly used method was misoprostol, followed by the use of teas.
Ramos et al[16]	Recife, Brasil (2005-2006)	Cross-sectional study.	The most frequent type of abortion was possibly induced. The most well-known method was misoprostol.
Martins et al[17]	Rio de Janeiro (1984-1985)	Sectional study.	Among the interviewees, 31% reported having already had an abortion. Of the abortion cases, 16.9% were induced, of which most were performed by physicians.
Hardy & Alves[18]	Rio de Janeiro (1992)	Secundary analysis of data obtained in previous study.	A lower rate of complications was observed among women who terminated their pregnancies in clinics or offices.
Fonseca et al[19]	Florianópolis, Brasil (1993-1994)	Inquire.	Half of the women who had an abortion reported using Cytotec (misoprostol). There was a decrease in the number of complications.
Silva et al[20]	Campinas, Brasil (2008-2009)	Cross-sectional study.	There was no statistically significant difference in complications between women who reported using misoprostol and those who used other methods.
Fusco et al.[21]	São Paulo, Brasil (2005)	Household survey.	Among the induced abortions, only 6 were performed in clandestine clinics. The most frequently cited complication was hemorrhage, followed by infection.
Chaves et al[22]	Maceió, Brasil (2006-2007)	Descriptive study.	According to the answers obtained, 63.6% of the abortions were provoked. Among those who were certainly induced, 89% reported using misoprostol.
Diniz e Madeiro[23]	Brasil (2010)	Household survey.	Among the women interviewed, 15% reported having interrupted their pregnancies. Half of the women used some medication for induction.
Diniz e Madeiro[24]	Brasil (2010-2011)	Household survey.	Most of the interviewees had at least one abortion. The most common method was the use of cytotec, which was completed in a hospital.
Diniz et al[5]	Brasil (2016)	Household survey.	Half of the women used some medication to induce abortion, and 48% of the women who induced the abortion required hospitalization.
Gomperts et al[25]	Brasil (2011)	Retrospective case study.	Of the 602 women who requested misoprostol, 370 used the medication. Among the women who reported the incident, 64 required surgical intervention.
Duarte et al[26]	Brasil (2016-2017)	Virtual ethnography.	There was a prevalence of the use of cytotec, alone or in combination with other methods. Hospitals were used for care after complications or for examinations.
Lima[27]	Brasil (1980-1995)	Sectional study using the SIM-DATASUS database.	A reduction in the mortality rate from abortion-related causes was noted.
Camargo et al[28]	Brasil (2006)	Secondary analysis of data obtained from the demographic health survey.	The rate of reported induced abortions was 2.3%, being higher in the North and Northeast. Complications were more frequent among women who miscarried.
Santana et al[29]	Brasil (2009-2010)	Multicenter cross-sectional study.	Abortion accounted for 2.5% of all women identified as having severe maternal morbidity.
Martins et al[30]	Minas Gerais, Brasil (2000-2011)	Ecological study.	They identified that abortion was the underlying cause of 15% of maternal deaths, with no change in the percentage over the period.
Kale et al[31]	São Paulo, Rio de Janeiro, Niterói, Brasil (2011)	Hospital-based sectional study.	The proportion of induced abortions was 11.9% in Rio de Janeiro and 1% in São Paulo. The most commonly used method was misoprostol.
Chaves et al[32]	Maceió, Brasil (2008-2009)	Descriptive study based on a structured questionnaire.	The most common method among adolescents, who assumed that they had finished their pregnancy, was misoprostol.
Nunes et al[33]	Piauí, Brasil (2011)	Cross-sectional and descriptive study.	A total of 30 adolescents were interviewed, and misoprostol was used by 94% of the adolescents. There were 3 cases of serious complications.
Madeiro e Diniz[34]	Porto Alegre, Belém e Teresina, Brasil (2012)	Estudo qualitativo.	All women interviewed reported at least one experience of abortion. The most common method was misprotol.
Madeiro e Rufino[35]	Piauí, Brasil (2010)	Quantitative and qualitative study.	Of the 310 women interviewed, 163 said they had had at least one abortion. The most commonly used method was misoprostol, followed by teas and tubes.

Ten articles address the methods used for terminating the pregnancy and its complications[5,17,18,19,20,21,22,23,24,25]. In Rio de Janeiro, a study carried out between 1984 and 1985 showed that of the abortions registered, 50.2% had been induced, and, of these, 62.1% were performed by physicians through curettage. Only a small portion of abortions (10%) were performed by third parties[17].

Moreover, the study points out that there were significantly fewer complications among women who interrupted their pregnancies with doctors compared to those who had an abortion induced by curious women[17]. In the same vein, Hardy and Alves[18] obtained similar results.

According to Fonseca et al.[19], of the 620 cases of abortion registered in a maternity hospital in Florianópolis between 1993 and 1994, 141 cases were classified as certainly provoked, and, in 50.4% of the cases, misoprostol was used, alone or in combination, for induction[19].

Approximately half of the cases of induced discontinuation showed signs of infection on admission and were treated with antibiotics. About 18% of the women had severe hemorrhage at admission, and in most cases (138), curettage was performed[19].

In Campinas, between 2008 and 2010, among the twenty-six women who had certainly induced the end of pregnancy, nine reported having used misoprostol, and seventeen reported having used other methods. Infectious complications were noted in eight women, and hemorrhagic complications were noted in nine women[20].

In the same sense, a high rate of complications after induced abortions (94.1%) was observed in São Paulo. Most abortions were induced by the use of misoprostol orally, intravaginally, or both - associated with a combination of teas[21].

In a study conducted in Maceió between 2006 and 2007, most of the women interviewed had possibly or certainly caused the interruption of pregnancy. Among those that had certainly induced the end of pregnancy, most used medications[22].

The first results of the PNA[23] and its structured interviews (PNA-interviews)[24] are in line with the results found in other studies[17,18,19]. The most common itinerary among women who have interrupted their pregnancies is the use of misoprostol in various dosages, with hospitalization to complete the abortion[23,24]. It has been noted that younger women use misoprostol less, resort to abortion or tea, and are hospitalized for the completion of the procedure[22].

Gomperts et al.[25], analyzing the records of 307 women who interrupted their pregnancies through medications obtained by the Women on Web website in 2011, observed that the majority (236) completed the abortion and that 64 women underwent a surgical procedure after using the medication[25].

As seen in other studies[19,21,23,24,25], Duarte et al.[26] noted, through the analysis of the narratives present on the Women on Web website between 2016 and 2017, that most women used misoprostol - alone or associated with teas and other methods - and finished the procedure in the hospital. They emphasize that inequalities are expressed in itineraries of greater or lesser complexity and sinuosity according to women's financial resources[26].

Five studies address maternal mortality due to abortion-related causes[27,28,29,30,31], three of which were nationwide[27,28,29]. According to data obtained through SIM-DATASUS, there was a decrease in abortion-related mortality in Brazil between 1980 and 199527. According to Camargo et al.[28], severe complications such as hemorrhages and infections were more frequent in cases of women who had abortions when compared to cases of women who gave birth.

A study conducted in 27 reference maternity hospitals identified that, although only 2.5% of cases of severe maternal morbidity result from post-abortion complications, maternal Near Miss are more frequent in cases of abortion. In these cases, the risk of Near Miss increases when the woman has a pre-existing condition or when there is a delay in receiving adequate medical attention[29].

A time series on maternal mortality in Minas Gerais between 2000 and 2011 identified that although the proportional contribution of abortion (15%) as a principal cause of maternal death did not suffer a significant change in the period, there was an increase of 38% when analyzed using the multiple causes method[30].

In a survey conducted in public maternity hospitals in São Paulo, Rio de Janeiro, and Niterói in 2011, with 7,845 women, only one maternal death was identified, due to causes unrelated to abortion. Among the cases of miscarriage identified in this study, the most commonly used method was misprostol[31].

Two articles address induced abortion in adolescents[32,33]. In Maceió, 81.59% of the interviewees had certainly had an abortion, and most of them had used misoprostol[32]. In Piauí, 94% (28) of the interviewees used misoprostol alone and went to the hospital to finish the procedure through curettage. There were complications in three cases, mainly due to poor post-abortion care[33].

Articles addressing induced abortion among prostitutes were also included[34,35]. One study interviewed 39 women who declared themselves sex workers in Porto Alegre, Belém, and Teresina[34]. All the women interviewed had had at least one abortion, the most common method being the use of misoprostol, followed by teas and clandestine clinics. The most common complications were abdominal pain and hemorrhage[34].

Another study conducted in Piauí brought similar results. Of the 310 women interviewed, 163 said they had had at least one abortion. Among them, the most used method (75%) was misoprostol, and 47.8% of the women reported the need to be hospitalized due to complications[35].

There was no reduction in the rate of unsafe abortion in national studies[5,23], although the rate of hospitalization for abortion has fallen[13,14,15,16], especially regarding severe complications arising from post-abortion. This result is consistent with those observed in a previous literature review[36].

The decrease in hospitalization due to severe complications is attributed, by different authors, to the widespread use of misoprostol, which began to be used as a method to interrupt pregnancy in the 90s and has become increasingly popular[5,18,20,24].

Nevertheless, hospital intervention is still present in most of the itineraries followed during pregnancy interruption. There is also a high number of curettages performed to complete the abortion and women who are advised to seek the institution at the beginning of the bleeding caused by the use of the medication[5,7,9,15,24,31].

Although the mortality of pregnant women due to induced abortion decreased between 1980 and 2011, it continues to be a significant cause of maternal death that can be avoided[27,28,29,30,31]. Studies indicate that maternal Near Miss remain high, especially when associated with pre-existing comorbidities or institutional violence[29,30,31].

Institutional violence, in turn, stems from the stigma associated with abortion by the various actors involved in contact with the pregnant woman, including public personnel and medical professionals responsible for the first care[8,10,11].

Among health professionals, it is possible to verify that the non-observance of primary care is sometimes based on moral and religious issues, completely ignoring the protocol established by the Ministry of Health to evoke "conscientious objection"[11,37].

FINAL CONSIDERATIONS

In view of the literature and all the studies presented since the 1980s, it is possible to conclude that, despite the decrease in mortality among women who have abortions, the high risk to women's health persists constantly and systematically

throughout the national territory. In addition, it is noted that the problem related to abortion is composed of several factors that go beyond the strictly medical approach, such as social, moral, and religious issues.

Notwithstanding the fact that the State has adopted specific measures over the years, the lack of a multidimensional approach to a problem rooted in several segments has prevented the advancement of measures capable of ensuring women's health. The "taboo" inherent to the aforementioned social stigma even hinders the discussion by a large portion of society regarding the possible measures to be adopted, despite the number of new victims that accumulate every year[11].

In addition, it was observed that the "state vacuum" has been predominantly filled – as is natural – by criminality, which aims to take advantage of women in situations of aggravated vulnerability (sometimes enhanced by social inequality) through the commercialization of false abortifacient drugs, as well as the performance of abortions in clandestine clinics without minimum conditions to safeguard women's health. In view of this situation, it is urgent to encourage society to build bridges through dialogue, facing the problem of abortion in its various facets and, thus, reducing – if not eradicating – the constant risk to women's health[6,7,11,25,26].

REFERENCES

1. JOFFE C. Abortion and medicine: A sociopolitical history IN: BORGATTA L. et al. Management of Unintended and Abnormal Pregnancy: Comprehensive Abortion Care. 1 ed. Wiley-Blackwell, 2009. doi: 10.1002/9781444313031.ch1
2. MACHADO L. O aborto como direito e o aborto como crime: o retrocesso neoconservador. Cadernos Pagu. 2016 jul; no.50. doi: 10.1590/18094449201700500004
3. PEREIRA T S, SILVA M P. O princípio da dignidade da pessoa humana e a autonomia da mulher frente à ampliação das hipóteses de aborto legal. Vestnik: Brasília 2015
4. Organização Mundial da Saúde (OMS). Abortamento Seguro: Orientação técnica e de políticas para sistemas de saúde. 2 ed. Uruguai: OMS, 2013.
5. DINIZ D, MADEIRO A, MEDEIROS M. Pesquisa Nacional de Aborto 2016. Ciência & saúde coletiva. 2017 fev vol.22, no.2. doi: 10.1590/1413-81232017222.23812016
6. DINIZ D, CASTRO R. O comércio de medicamentos de gênero na mídia impressa brasileira: misoprostol e mulheres. Cadernos de Saúde Pública. 2011 jan; vol. 27;. doi:10.1590/S0102-311X2011000100010
7. FERRARI W, PERES S. Itinerários de solidão: aborto clandestino de adolescentes de uma favela da Zona Sul do Rio de Janeiro, Brasil. Cadernos de Saúde Pública; 2020 fev; vol.36, supl.1. doi:10.1590/0102-311x00198318
8. ALMEIDA M et al. Vulnerabilidade racial e barreiras individuais de mulheres em busca do primeiro atendimento pós-aborto. Cadernos de Saúde Pública. 2020 fev.; vol.36 ; supl.1. doi: 10.1590/0102-311x00189618
9. CARVALHO F et al. Atenção ao abortamento em instituições hospitalares da rede SUS de Fortaleza, Ceará. Cadernos de Saúde coletiva. 2020 abr; vol. 28, no.1. doi:10.1590/1414-462x202028010297
10. MADEIRO A, RUFINO A. Mau-tratos e discriminação na assistência ao aborto provocado: a percepção das mulheres em Teresina, Piauí, Brasil. Ciência & saúde coletiva. 2017 ago; vol. 22; no. 8. doi: 10.1590/1413-81232017228.04252016
11. ADESSE L, BONAN C, FONSECA V, SILVA K. Aborto e estigma: uma análise da produção científica sobre a temática. Ciência & Saúde coletiva. 2016 dec; vol. 21; no.12. doi:10.1590/1413-812320152112.07282015
12. ADESSE L, BONAN C, FONSECA V, SILVA K. Complicações do abortamento e assistência em maternidade pública integrada ao Programa Nacional Rede Cegonha. Saúde em debate. 2015 set; vol. 39, no.106. doi:10.1590/0103-1104201510600030011
13. SINGH S., MONTEIRO M., LEVIN J. Trends in hospitalization for abortion-related complications in Brasil, 1992-2009: Why the decline in numbers and severity. International Journal of Gynecology and obstetrics. 2012; vol.118. doi:10.1016/S0020-7292(12)60007-1
14. SORRENTINO S., LEBRÃO M.L. Os abortos no atendimento hospitalar do Estado de São Paulo, 1995. Rev. Bras. Epidemiologia. 1998; vol.1. doi: 10.1590/S1415-790X1998000300005
15. SOUZA A. et al. Reasons for hospitalization due to abortion and pregnancy termination. Journal of Tropical Pediatrics. 1999 fev.; vol. 25. doi:10.1093/tropej/45.1.31
16. FERREIRA A., SOUZA A. Mulheres hospitalizadas por abortamento em uma maternidade escola na cidade de Recife, Brasil. Rev. Esc. Enferm USP, 2010; vol 44. doi: 10.1590/S0080-62342010000300008
17. MARTINS I. et al. Aborto induzido em mulheres de baixa renda: Dimensão de um problema. Cadernos de Saúde Pública. 1991, vol.7. doi:10.1590/S0102-311X1991000200009
18. HARDY E., ALVES G. Complicações pós-aborto provocado: Fatores Associados. Cadernos de Saúde Pública. 1992. vol. 8. doi: 10.1590/S0102-311X1992000400010
19. FONSECA et al. Características sócio-demográficas, reprodutivas e médicas de mulheres admitidas por aborto em hospital da Região Sul do Brasil. Cadernos de Saúde Pública, 1998; vol. 14. doi: 10.1590/S0102-311X1998000200004
20. SILVA et al. Aborto provocado: redução da frequência e gravidade das complicações. Consequência do uso de misoprostol? Rev. Bras. Saúde Matern. Infan.,2010, vol.10. doi: 10.1590/S1519-38292010000400004
21. FUSCO C., ANDREONI S., SILVA R. Epidemiologia do aborto inseguro em uma população em situação de pobreza - Favela Inajar de Souza, São Paulo. Rev. Bras. Epidemiol. 2008; vol. 11. doi: 10.1590/S1415-790X2008000100007
22. CHAVES J. et al. O abortamento incompleto (provocado e espontâneo) em pacientes atendidas em maternidade do Sistema Único de Saúde. Rev. Bras. Clin. Med. São Paulo, 2011; vol. 9. LILACS: ID: lil-588517
23. DINIZ D., MADEIROS M. Aborto no Brasil: uma pesquisa domiciliar com a técnica de urna. Ciência & Saúde Coletiva. 2010; vol. 15 doi: 10.1590/S1413-81232010000700002
24. DINIZ D, MADEIROS M. Itenerários e métodos do aborto ilegal em cinco capitais brasileiras. Ciência & Saúde Coletiva. 2012; vol. 17 doi: 10.1590/S1413-81232012000700002
25. GOMPERTS R. et al. Provision of medical abortion using telemedicine in Brazil. Contraception. 2014, vol.89. doi: 10.1016/j.contraception.2013.11.005
26. DUARTE N., MORAES L., ANDRADE C. A experiência do aborto na rede: análise de itinerários abortivos compartilhados em uma comunidade online. Ciência & Saúde Coletiva. 2018, vol. 23 doi: 10.1590/1413-812320182310.14062018
27. LIMA B. Mortalidade por causas relacionadas ao aborto no Brasil: declínio e desigualdades espaciais. Rev. Panam. Salud Publica. 2000, vol. 7. doi: 1590/s1020-49892000000300005
28. CAMARGO R.S. et al. Severe maternal morbidity and factors associated with the occurence of abortion in Brazil. International Journal of Gynecology and Obstetrics. 2011; vol. 112 doi: 10.1016/j.ijgo.2010.08.013
29. SANTANA D.S. et al. Severe maternal morbidity due to abortion procpectively identified in a surveillance network in Brasil. International Journal of Gynocology and Obstetrics.

2012; vol. 119. Doi: 10.1016/j.ijgo.2012.05.025
30. MARTINS E.F. et al. Causas múltiplas de mortalidade materna relacionadas ao aborto no Estado de Minas Gerais, Brasil, 2000-2011. Cadernos de Saúde Pública. 2017; vol. 33. doi: 10.1590/0102-311x00133116
31. KALE P.L. et al. Morte de mulheres internadas para parto e por aborto e de seus conceptos em maternidades públicas. Ciências & Saúde Coletiva. 2018; vol. 25. doi: 10.1590/1413-81232018235.18162016
32. CHAVES J.H.B. et al. Abortamento provocado e o uso de contraceptivos em adolescentes. Rev. Bras. Clin. Med. 2010; vol. 8 LILACS: lil-543992
33. NUNES M., MADEIRO A., DINIZ D. Histórias de aborto provocado entre adolescentes em Teresina, Piauí, Brasil. Ciência & Saúde Coletiva. 2013; vol.18. doi: 10.1590/S1413-81232013000800015
34. MADEIRO A., DINIZ D. Induced abortion among Brazilian female sex workers: a qualitative study. Ciência & Saúde coletiva. 2015; vol.20. doi: 10.1590/1413-81232015202.1120201
35. MADEIRO A., RUFINO A. Aborto induzido entre prostitutas: um levantamento pela técnica de urna em Teresina - Piauí. Ciência & Saúde Coletiva. 2012; vol.17. doi: 10.1590/S1413-81232012000700012
36. DOMINGUES R. et al. Aborto inseguro no Brasil: revisão sistemática da produção científica, 2008-2018. Cadernos de Saúde Pública, 2020; vol.36. doi: 10.1590/0102-311x00190418
37. MADEIRO A. et al. Objeção de consciência e aborto legal: atitudes de estudantes de medicina. Revista Brasileira de Educação Médica, 2016; vol. 40. doi: 10/1590/1981-52712015v40n1e02382014