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## The multiple meanings of 'risk':

Views on the abortion of non-viable fetuses among Brazilian medical doctors and magistrates

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#### Resumo

O artigo tem como objetivo compreender as concepções de risco acionadas pelo campo médico e interpretadas pelo campo jurídico a partir da análise de decisões judiciais relativas à autorização do aborto de fetos com anomalias fetais incompatíveis com a vida e de entrevistas não-diretivas realizadas entre médicos e magistrados. Verificamos que a categoria de risco é bastante manipulada por médicos e magistrados na medida em que essa categoria é acionada enquanto uma justificativa para tornar moral o aborto de fetos inviáveis, com o objetivo de afastar o aborto da esfera da escolha individual da gestante para inseri-lo no âmbito do aborto terapêutico. Destaca-se também o caráter polissêmico do discurso sobre risco, tendo em vista que ele é utilizado tanto para conceder ou negar as autorizações judiciais para aborto, como para atribuir a responsabilidade da decisão sobre o aborto aos médicos.

Palavras-chave: Risco, Aborto, Campo Médico e Campo Jurídico.

#### **Abstract**

The article seeks to understand the conceptions of 'risk' produced in the medical field as they come to be interpreted in the legal field. It draws on legal decisions concerning authorization for aborting fetuses bearing anomalies incompatible with life, and on non-directive interviews with medical doctors and magistrates. The category of 'risk' was found to be subject to considerable manipulation by both doctors and magistrates in being deployed as moral justification for the abortion of non-viable fetuses. Abortion is thus displaced from the sphere of individual choice to the domain of therapeutic abortion. The article also highlights the polyvalence

of risk discourse, since this notion is deployed both to affirm and to deny legal authorizations for abortion, and to attribute responsibility for abortion decisions to doctors.

**Keywords:** Risk, Abortion, Legal Field, Medical Field.

## The multiple meanings of 'risk':

Views on the abortion of non-viable fetuses among Brazilian medical doctors and magistrates

Juliana Lopes de Macedo

Prior to April 12th 2012, the abortion of anencephalic fetuses in Brazil required legal authorization. Although a Federal Supreme Court decision issued on this date overruled the need for authorization in this particular case, other types of fetal anomalies incompatible with extrauterine life remain dependent on assessment by the courts on a case-by-case basis. To obtain authorization, a legal case needs to be filed containing some kind of medical justification for the abortion. Medical doctors participate in these cases by submitting a report containing evidence that the pregnancy in question is generating a fetus with some type of anomaly incompatible with extra-uterine life. Since this medical report will support a legal case, it must comply with certain parameters, including a diagnosis and the indication of a medical procedure appropriate for treating the condition. According to the physicians interviewed, besides confirming fetal non-viability, the report must also recommend abortion as a medical solution to the problem - in other words, the fetus's non-viability and the pregnant woman's wishes alone are insufficient grounds for legal persuasion. It is up to the doctors, therefore, to advocate on behalf of the expectant mother by providing a medical justification for her decision to request abortion.

In the cases analyzed here, one claim frequently put forth as justification for abortion is the risk that this kind of pregnancy poses to women. 'Risk' is one of the categories around which modern society has been organized (Beck 1993, Neves 2004). Its importance is such that some authors have gone as far as to suggest that risk is at the core of the contemporary world – thus the emergence of a 'risk society' (Beck 1993, Spink 2001). According to Douglas (2002), risk means danger and implies a particular way of relating to the future. While the world's dangers were once seen from a fatalistic

perspective, now these dangers can be domesticated, controlled, predicted and avoided through systematic observation (Luiz & Cohn 2006).

Epidemiology in particular has enabled the control and monitoring of individual health, and risk is a key conceptual tool towards this end (Ayres 2002, 2011). Through statistics, and in particular probability theory (Luiz & Cohn 2006), risk is translated into mathematical reason. For Rabinow (2002), as well as a mathematical measurement, risk is also a central notion in modern medicine's strategies of control, surveillance, and discipline. In his words:

Modern prevention is above all the tracking down of risks. Risk is not a result of specific dangers posed by the immediate presence of a person or a group but, rather, the composition of impersonal 'factors' which make a risk probable. Prevention, then, is surveillance, not of the individual but of likely occurrences of diseases, anomalies, deviant behavior to be minimized, and healthy behavior to be maximized. We are partially moving away from the older face-to-face surveillance of individuals and groups known to be dangerous or ill (for disciplinary or therapeutic purposes), towards projecting risk factors that deconstruct and reconstruct the individual or group subject. This new mode anticipates possible loci of dangerous irruptions, through the identification of sites statistically locatable in relation to norms and means. (2002: 100)

Even though the medical field describes risk in mathematical terms – and is thus represented as impartial, universal, concrete data – empirical observation showed the opposite: the ambivalent, elastic character of the notion of risk as it is operationalized and deployed in practice. In this sense, this article looks to understand the notions of risk put forth by the medical field and interpreted in the legal field, based on an analysis of legal decisions regarding authorization for aborting fetuses with anomalies incompatible with life.

The data set on which this article is based includes 27 legal decisions¹ on the abortion of fetuses with anomalies incompatible with life issued between 2001 and 2011 by the Rio Grande do Sul State Court of Justice (Tribunal de Justiça do Rio Grande do Sul: TJRS). Of these 27 decisions, 19 are requests for

 $_{\rm I}$   $\,$  Since the analysis encompasses legal decisions made in both trial and appeals courts, I have opted to refer to all these instances as legal decisions.

aborting anencephalic fetuses, and 8 regard abortions linked to other types of fetal malformation. In the first group, three were denied, and another three were deemed compromised either because the decision had already been issued made by one judge alone through a temporary court order<sup>2</sup> or because the expectant woman abandoned the case. In the case of seven of the 12 orders authorizing the abortion of anencephalic fetuses, the three judges agreed to the request, and in four cases one of the judges refused to grant the order. Of the eight requests for abortion based on other fetal malformations, only three were granted.

To make better sense of the contexts in which these legal decisions were made, I also used a methodology based on non-directive interviews with physicians and magistrates possessing acknowledged experience in this kind of legal case. I interviewed nine gynecologist-obstetricians³ and six magistrates who took part in cases involving non-viable fetuses in the Rio Grande do Sul Court of Justice.⁴ The research project was approved by the Ethics in Research Committee of the Federal University of Rio Grande do Sul, and all informants were invited to participate in the research by means of a Term of Free and Informed Consent. Since this study aims to analyze risk-based justifications contained in legal decisions and interviews with medical doctors and magistrates concerning requests to abort anencephalic fetuses and those with other kinds of malformations, I shall henceforth describe this procedure through the term abortion of non-viable fetuses.⁵

<sup>2</sup> The appeals court involves an assessment of the case and vote by three judges, one of whom is the rapporteur. But when a temporary order is requested (that is, when the interested party requests urgency), it is common for just the rapporteur to vote. Irrespective of this previous decision, the case follows the regular procedure and is assessed again by two other judges, who, in the cases analyzed here, concluded that the trial had been compromised since it was no longer possible to undo the decision (i.e. the abortion).

<sup>3</sup> All doctors interviewed were affiliated with hospitals with recognized capacity for managing high-risk pregnancies, and with hospitals belonging to the referral network where abortions may be legally performed in Rio Grande do Sul.

<sup>4</sup> Five of the physicians interviewed were female, and four were male. Of the magistrates interviewed, only two were women. Among both groups (medical doctors and magistrates), neither gender or affiliation to a particular religion appeared to influence the informants' views or stances on anencephaly. Both the medical and legal fields are associated with the male gender (where characteristics such as pragmatism and rationality are emphasized). They determine the way actors will position themselves in their field of practice regardless of gender – in other words, profession overlaps with gender. Almost all informants declared themselves to be Catholic, but most were favorable to the abortion of anencephalic fetuses. This does not imply that the physicians and magistrates interviewed did not hold religious or moral conceptions, or that these did not influence their views on the abortion of anencephalic fetuses. It does show, though, that religious belonging does not determine a person's stance on this kind of abortion.

Abortion debates involve a wide range of 'modalities' such as: voluntary interruption of pregnancy, necessary

# Norm and Strategy: operationalizing the notion of risk among physicians

As mentioned previously, the interviewed physicians all stated that when writing a medical report it is not enough to describe the diagnosis and indicate a technical procedure for treating the problem in question. To convince a magistrate, further justification is required, especially in the case of procedures involving abortion. Doctors therefore deploy various strategies to improve their chances of success. The notions of norm and strategy proposed by Bourdieu (2007b) in his study of the Kabila marriage system can help make sense of how medical reports on the abortion of non-viable fetuses are constructed. Norm may be defined as a prescriptive system determining how things should be. Strategy, in turn, is informed by the 'practical sense' of agents involved in the game, which makes possible the manipulation of norms. Practical strategies become meaningful in relation to the larger universe of possible strategies, as defined by the habitus (Bourdieu 2007b). In the case of abortion, the norm is limited to cases of rape or risk of the expectant mother dying. Given that the medical habitus is governed by scientism and rationality, one possible strategy available is to deploy scientific expediencies to justify a case for abortion that is not written in the norm. These strategies have translated into the definition of a fetal anomaly incompatible with extra-uterine life, scientific claims, and flexibilization of the notion of risk in order to frame pregnancies with anencephalic fetuses in terms of a category prescribed by the law - namely, therapeutic abortion. So, for example, one informant declared that writing a good medical report to support the abortion of anencephalic fetuses must involve:

abortion, therapeutic abortion, sentimental abortion, humanitarian abortion, selective abortion, abortion due to fetal anomalies, eugenistic abortion, anticipation of childbirth therapy, legal abortion, among others. In her analysis of law bills being reviewed by the Brazilian National Congress, Débora Diniz (2001) argued that the term is not limited to linguistic choices: on the contrary, this choice reflects the moralities involved in the debates, as well as the strategies chosen to defend different stances on the issue. In public debates on anencephaly, those supporting abortion deploy the expression 'anticipation of childbirth therapy,' while those opposing the practice use the term abortion. I understand the choice of the expression 'anticipation of childbirth therapy' as a legitimate political choice aimed at minimizing moral discussions on abortion and at making the abortion of anencephalic fetuses more ethically, legally and morally acceptable to society. For the purposes of this article, however, I have opted to use the expression abortion of non-viable fetuses to refer to the voluntary interruption of pregnancy in such cases. This choice is also political, inasmuch as I support abortion as a woman's right that deserves to be rendered visible as such.

First: certainty about the diagnosis. Second: certainty about the prognosis. And another thing: come up with a persuasive argument. How to do that: if I write that it's a case of brain death, they'll say it's not; if I say that the anencephalic fetus will increase the probability of pregnancy-related complications, that's not documented in the literature. But if I write that it increases risk, now that is documented in the literature, and then I add all the evidence for this. (Carlos, gynecologist-obstetrician, Hospital D and private clinic.)

The deployment of the category 'risk' is not a haphazard choice by the physicians, but rather a claim that enjoys high social appeal due to the part it plays in organizing modern society and how it relates to the future by minimizing the dangers inherent to life itself. Moreover, by establishing risk as a justification for aborting anencephalic fetuses, the focus is shifted away from the pregnant woman's moral decision towards a decision made within a technical sphere.

The meanings attributed to risk in pregnancies with anencephalic fetuses are quite flexible, and medical doctors have engaged differently with the matter both in theory (technical reports) and in practice (management of pregnancy). In the words of two informants:

In principle, no, it's about speculation. Let's suppose she reaches the end of her pregnancy and the baby is not born, she is cared for in an inappropriate facility or by someone who is not experienced, and eventually opts for a C-section, which is an unnecessary surgery involving anesthetics. (Paulo, gynecologist-obstetrician, Hospital A and private clinic.)

If the child has a tendency for increased amniotic fluid, if it doesn't swallow properly, then nature may interpret the fact as a lengthier pregnancy. So this kind of issue could be considered. This argument is often deployed in legal authorizations. But this is, let's say, a probability, not a prognosis. An increased risk. The best argument, I think, is that every pregnancy is risky (...) If you run this risk when all is well with the baby, that's just natural. But for a young, fertile woman to run the risk of serious complications for a baby that is not even going to live is unjustifiable (...) In the literature, you'll find a lot of people making this claim. It's a legally functional claim. But clinically, epidemiologically, it's different. (Claudia, geneticist, Hospital A and private clinic.)

These statements make clear that, in practice, risk is an exceptional possibility that may be actualized in extreme cases, such as increased amniotic fluid or an unnecessary C-section. But for the doctors, these factors are not epidemiologically significant: in other words, they would not by themselves justify an abortion. For them, the key justification for abortion is fetal unviability. Here, though, they have to persuade another agent – the judge – who may take into account factors other than the unviability of the fetus. Thus, the flexibility and malleability of the category 'risk' is part of a valid and persuasive strategy for justifying the abortion of non-viable fetuses. In this context, claims about increased *risk* become part of a rhetorical strategy aimed at associating the abortion of non-viable fetuses to necessary abortion – that is, cases where the pregnant woman's life is at risk. This was a common tactic in the cases I analyzed, and has also been found by Diniz (2003).

Since the justification included in the medical report is relatively fragile, given that risk is not immediately evident, physicians resort to the production of 'sub-evidence,': that is, documents appended to reports in order to support their veracity. There is an understanding among doctors that, in the case of abortion of anencephalic fetuses, all reports must be accompanied by ultrasound images diagnosing fetal unviability. And since not everyone understands just how serious the lack of a cranial vault is, some teams include photographs of anencephalic newborns in order to show that this anomaly is not just a handicap:

...include a picture of an anencephalic baby to move them, because many judges don't know, they have no idea what they are dealing with. They think it's some problem internal to the head. They don't know there's no vault, the brain is rudimentary, you know, that extra-uterine life is impossible. (Ana, gynecologist-obstetrician, Hospital D.)

In this context, photographs produce truth in much the same way as image-based diagnostic exams. If ultrasounds construct the fetus as a person (Chazan 2007), so photographs of anencephalic newborns make it possible to visualize their non-viability – when the judge looks at it, she can come to her own conclusions about the possibilities of extra-uterine life. In his study of how the scientific literature is constructed, Latour (1987) argues that the references, citations, footnotes, graphs, tables and so on that make up a

scientific text signal whether the claim will be taken as fact or fiction, since to contest an article that includes many references requires all of them to be challenged. For a judge to oppose abortion from a medical perspective, therefore, she would need to contest the medical statement, the ultrasound, the assessment of the doctor who performed the ultrasound, the photographs of anencephalic fetuses, and the entire scientific literature appended to the report. Even so, sometimes a judge does indeed refuse to grant authorization. And since, according to the physicians interviewed, it is impossible to dispute all these elements, the reason for such a refusal can only be down to the magistrate's bad faith. In the words of one informant "the judge herself, her character, I don't know, her religion even, because even a judge has preconceived views" (Ronaldo, gynecologist-obstetrician, Hospitals A and B). In the face of clear and indisputable 'scientific evidence,' therefore, the only alternative left to explain the refusal to grant an abortion permit is the interference of some religious belief (defined in opposition to science).

### Risk: a polyvalent category

It is interesting to observe that while doctors rely on risk claims to justify the abortion of non-viable fetuses, magistrates deploy the very same notion to both deny and grant abortion authorizations. Here Foucault's idea of the tactical polyvalence of discourse (Foucault 1990) can help make sense of how risk may be used to different ends in the same process. For Foucault, power and knowledge are articulated in discourse. However, the world of discourse is not split between the accepted and the excluded; rather, there are a multitude of discursive elements that can be recruited into different strategies. In this sense, it is risk's polyvalence that enables it to be deployed in the justifications put forth by different strategies and stances.

Risk-based discourse was present in more than half the legal decisions analyzed. The strategy involves either approximating or distancing pregnancies involving a non-viable fetus to pregnancies that pose a death risk to the woman, whether or not the procedure is explicitly framed as therapeutic abortion.

One essential precondition for granting permission to abort in these cases is certitude about the fetus' non-viability. Evidence to this end is

provided through medical reports appended to the case. For this reason, regardless of the outcome, debates during legal assessment have to address issues of a medical nature. In her analysis of legal permits for aborting anencephalic fetuses, Diniz (2003) also found that risk-based arguments concerning the pregnant woman's health are the most common in this kind of jurisprudence. Except for two cases (one of anencephaly and the other concerning a fetus with another kind of malformation incompatible with life) where the claimants' pregnancies were considered to involve risk of death, all other opinions stressed fetal non-viability and the need for a C-section. This leads to another issue regarding risk: although C-sections are generally associated with higher risks - hence the recommendation of abortion in the case of non-viable fetuses –, it is widely accepted among both obstetricians and pregnant women. Brazil has one of the world's highest rates of C-section births (WHO 1985, Víctora et al. 2011) and prevalence is higher among private hospitals than the public health system (Faundes & Cecatti 1991, Yazlle et al. 2001; Fabri et al. 2002, Faúndes et al. 2004, Haddad & Cecatti 2011).6 This suggests that the higher on the economic scale, the more autonomy the woman has for choosing this kind of procedure, even if it is more risky. C-sections are considered to involve risk, but risk is inherent to any pregnancy. What makes physicians contraindicate use of a cesarean section in the case of non-viable fetuses, therefore, is not just risk. From the doctors' perspective, the interruption of pregnancy is equivalent to an abortion: to deploy a C-section to this end is thus unthinkable for them. As they explained during the interviews, it only makes sense for viable fetuses, not only because of the increased risk but because a C-section is not an abortion method. The only abortion procedure recommended for pregnancies above twelve weeks is pharmacological, which involves a method similar to induced childbirth.

As remarked earlier, doctors observe that the kind of risk cited in their reports is not the same kind written into the Penal Code. Women are not at risk of death and may take pregnancy to full term without harm to their

<sup>6</sup> In their study of 86,120 births in the city of Ribeirão Preto (São Paulo State) between 1986 and 1995, Yazlle et al. (2001) found the C-section rate to be 32.1% in public hospitals, and 81.8% in private hospitals. Fabri et al. (2002) compared the rate of C-sections between one public and one private hospital located in the state of Minas Gerais in 1996, and found that C-sections accounted for 24.3% of births in the public hospital against 89.2% in the private hospital. Haddad and Cecatti (2011) found that the rate of C-sections in Brazil in 2006 was 30.1% in the public system versus 80.7% in private hospitals.

health. But the request to abort a non-viable fetus requires justification, and from the physicians' point of view, this justification has to go beyond fetal non-viability. Widening the concept of risk is thus deployed as a strategy to persuade magistrates to grant the authorization for abortion.

In the cases where authorization for aborting non-viable fetuses was granted, magistrates themselves emphasized the death risk faced by the pregnant woman. Indeed, legally this is the most morally acceptable claim, since it is clear to the judges that in the event of having to choose between the mother's life and that of the fetus, the former should prevail, as prescribed by Brazil's Penal Code. The passage below, taken from one of the cases analyzed, is emblematic:

(...) anencephaly is characterized by the absence of cranial bones and the brain, thus making the fetus incompatible with life after birth. It also poses health risks to the pregnant woman, since birth of a child with acrania may be difficult, and pregnancy itself may be delayed for over one year. (...) Physicians concluded that the pregnancy needs to be interrupted as an immediate and undisputed procedure, since death of the unborn is unequivocal, and ending the pregnancy will bring benefits to the woman. (Case no. 04, Appeals Court Judge A, 2002.)

In this decision, the magistrate accepted that pregnancy with an anencephalic fetus does pose health risks to the pregnant woman, since childbirth is more difficult and pregnancy itself may be delayed<sup>7</sup> – the need for abortion being thus indisputable. Moreover, the fact that pregnancy last longer in this case suggests that anencephalic fetuses may not fit the category of 'humanity.'

However, risk-based claims are only successful when magistrates are already inclined to adopt a favorable stance to aborting non-viable fetuses. Judges who reject such requests (who, according to our data, based their decisions on a belief in the sacrosanct nature of human life and the need to control procedures they consider eugenistic) usually aim first at risk-based arguments. One example is a case involving a medical report that confirmed anencephaly and, therefore, incompatibility with extra-uterine life. The

<sup>7</sup> The difficulties involved in giving birth to an anencephalic fetus and the need for a C-section are mentioned in all medical reports. The lack of a cranial vault makes vaginal birth more difficult. However, when abortion is authorized, it is preferably carried out through vaginal delivery, precisely the kind considered more complicated in the case of anencephalic fetuses.

request was denied because two of the three ultrasound exams presented by the claimant showed that the volume of amniotic fluid was normal, so the magistrates understood that there was no risk to life involved (even though one exam did show increased volume, which could pose added risks to health). The statement below is another example of how judges have used the notion of risk to deny authorization. Here, the Appeals Court judge recognizes that the ultrasound confirmed the fetal malformation. However:

It did not show that the patient is at risk of death or suffering from a serious condition. (...) Therefore, given that this is not a case of therapeutic abortion in any of its modalities [i.e., necessary (to save the pregnant woman's life) or prophylactic (to save her from a serious condition)], the request cannot be granted. (Case no. 25, Appeals Court Judge C, 2008.)

In these cases, what makes the abortion of a fetus with malformations incompatible with life acceptable or not is not the harm that the pregnancy may cause the woman. Those magistrates who use this argument in order to grant authorization employ a legal manoeuver whereby such requests are included in the category of *causa excludente de ilicitude* (permissible illegal activity), which allows for abortion when the pregnant woman's life is at risk. In most of the cases analyzed here, this risk is virtual, since in most of the medical reports the risk of death appears as a prognosis inherent to any pregnancy. Nonetheless, this has clearly been an effective argument, given the high number of authorizations for abortion granted in cases where this was the central claim. One of the magistrates interviewed declared that

...to get an injunction, you need to get a lawyer. This happens within hours, minutes even – if there's a risk of death, you can't wait two days for an authorization and a warrant, can you? So there was this problem, I'm not saying suspicion, but, why would you make this request if the woman is dying? It should have been made already, it would even count as a case of medical malpractice [laughs]. (Antônio, Magistrate.)

For this informant, the very existence of a legal case shows that there is no risk to the pregnant woman concerned – had there been any real risk, there would have been no time to wait for a trial in order to perform the abortion. Another informant declared:

I haven't heard of any case of the refusal to authorize eugenistic abortions increasing death rates among mothers. I've seen many cases of mothers having children suffering from anencephaly, microcephaly and acrania where the children were born and there was no increased risk of death to the mother. (Laura, Magistrate.)

The magistrates who reject such requests realize that the risk-based justification included in the medical reports is a strategy for displacing the abortion of non-viable fetuses from the pole of selective/eugenistic abortion to that of necessary/therapeutic abortion. Those who grant authorization also recognize risk-based justifications as a legal strategy, and are well aware that this risk is virtual rather than imminent. However, matters in reaching their decision is not the risk itself, but fetal non-viability. For example, one of my informants stated that the elements he deems essential when authorizing the abortion of a non-viable fetus are "the unwillingness to take the pregnancy to full term, and a confirmation that the child does indeed have anencephaly" (Roger, Magistrate).

Referring to a peer who rejected a request to abort an anencephalic fetus, another informant said that:

But then Antônio expected a demonstration of full risk in the medical report, let's say: in the case of a desired, planned pregnancy, which mother would want to interrupt it? In principle, none. But then the doctor says that the possibility is one in a million, and you were the 'lucky' one. Some will want to take the pregnancy to full term while trying to deny the problem, waiting for a miracle. But today there's no way, previously we couldn't see the problem until after birth. Now there's no need to go through the entire process [of pregnancy]. But there are exceptions, and in the end they end up proving the rule. (Milton, Magistrate.)

According to the physicians and magistrates I interviewed, pregnancies involving anencephalic fetuses do not pose any additional health risks to the mother beyond those inherent to any pregnancy. Though not always successful, the risk-based claim is deployed because fetal non-viability and the pregnant woman's wishes are not considered valid justifications from a moral viewpoint. Doctors and magistrates favorable to the abortion of non-viable fetuses resort to the risk-based rhetoric in order to remove the weight from the woman's personal choice: rather than an individual desire, the option to abort appears as a medical recommendation.

It is interesting to observe a sharp polarity in terms of how magistrates have interpreted the medical data submitted in legal cases. There is one group that completely ignores the data brought by the doctors, thus delegitimizing medical science's expert knowledge. And there is another group that values technological advances in the medical field. One of the cases mentioned earlier illustrates how magistrates may ignore or manipulate the information contained in the medical reports: the request was denied because, even though the medical exams confirmed anencephaly and showed a difference in the volume of amniotic fluid, the latter was not interpreted by them as a sign of danger to the mother's health. Even though it was difficult to dispute the image of an anencephalic fetus shown in the ultrasounds, the medical report's recommendation to interrupt pregnancy was ignored because the exams failed to show any risk of death.

Another example was a decision issued by a judge who denied the abortion of an anencephalic fetus on the grounds that, "at the present moment, there is **only** a statement by two doctors claiming that a risk of death to the claimant exists should her pregnancy continue" (Case no. 22, Appeals Court Judge A, 2007 [my emphasis]). Use of the expression 'only' to refer to evidence intended to confirm the risk of maternal death is remarkable, as well as the fact that two different medical opinions were considered insufficient to prove the risk to the pregnant woman's health. The physicians and magistrates I interviewed all claimed that two medical reports are enough to prove fetal non-viability in cases requesting legal permission to abort. In this case, where the judge declared that there were 'only' two medical opinions, she was not stating that more reports were needed, but that the case presents 'only' the opinion of doctors. Both the medical and legal spheres can be framed as social fields in Bourdieu's sense (Bourdieu 1996, 2005, 2007a): that is, they delimit hegemonic ways of knowing, their own common sense and general laws. They are made up of agents and institutions that are socially legitimized representatives of the norms that guide each field. As such, they are authorized (and have the authority) to deal with certain issues – in our present case, issues concerning health and the law. In this sense, it can be said that while medicine is guided by science, law is guided by morality. There seems to be a struggle, therefore, between the medical and legal fields when it comes to the abortion of non-viable fetuses. While the medical field has the competence to define and diagnose a non-viable fetus, the decision

on what can or cannot be done about the fact lies outside its scope and is taken instead in the legal field.

On the other hand, magistrates have not disregarded scientific advances in the medical field over the last decades. All magistrates who granted permission mentioned technological advances in medicine and diagnostic precision as arguments for authorizing the abortion of non-viable fetuses. Nikolas Rose argues that:

Medical jurisdiction extended beyond accidents, illness and disease, to the management of chronic illness and death, the administration of reproduction, the assessment and government of 'risk,' and the maintenance and optimization of the healthy body (2007: 10).

For this author, medical technologies are technologies of optimization, insofar as they do not seek only to cure diseases but also to control vital processes. It is in this sense that magistrates point on one hand to technological developments in medicine (especially when it comes to image-based exams such as obstetric ultrasound), and on the other to the obsolescence of the Penal Code, as reasons for authorizing the abortion of anencephalic fetuses.

## The silence of law versus failure to provide care: accusations between physicians and magistrates

While some physicians accuse magistrates of taking legal decisions based on moral views, it is the doctors who most frequently face accusations of neglect from the magistrates. These are the flip side of the coin of risk-based justification. On one hand, the rhetoric of risk is necessary for the doctors to justify the abortion of non-viable fetuses and for the magistrates who authorize the procedure to frame it in terms of the provisions for legalized abortion. But on the other hand, the demonstration of risk involved in the pregnancy of non-viable fetuses is not only unable to persuade those magistrates who stand against abortion, it may also lead to accusations of failure to provide care – in the sense that the physicians who identified a 'risk' did not act thereupon to preserve the patient's life or health. This claim was found in eight of the decisions analyzed. Some magistrates claimed, for instance, that abortion is a medical procedure on which doctors have to decide:

...my firm stance is that if there is any risk of death to the pregnant woman, it is not up to the courts to assess the degree of risk involved. It is up to the doctor, based on his expert knowledge, to assess the particular case. So, if the risk of death to the woman is supported by medical parameters, he can proceed under legal authorization, which overrides all others. (Case no. 28, Appeals Court Judge C, 2008.)

This view of risk differs from the one presented earlier: here the magistrates' aim is not to reach a decision but to establish that whenever a risk to the pregnant woman's health is involved, decisions should be made by the medical doctors rather than magistrates. Despite acknowledging the existence of risks, therefore, the magistrate turned down the requests for abortion on the grounds that this should be a strictly medical decision, meaning that it can be classified as legal abortion. This kind of argument is also based on Article 128, Subsection I of the Penal Code, but it comprises a literal interpretation: pregnancy can only be interrupted in the case of the risk of imminent death, if there is no other alternative for saving the woman's life. Many cases have included this claim, but one of them is particularly telling, since according to the medical opinions involved, the risk of death was real, not virtual, as in most other cases. This was a thirteen-week pregnancy of a fetus showing multiple malformations that made it incompatible with extrauterine life. The medical report indicated the possibility of uterine rupture and ensuing internal bleeding, which could indeed lead to death. For the rapporteur (who authorized all other requests for aborting non-viable fetuses analyzed here), the medical report stating the risk of death was enough to warrant authorization. The second judge presented a long discourse on how immoral and eugenistic it was to interrupt the pregnancy of a malformed fetus, before granting the authorization in view of the risk posed to the pregnant woman's life – thus framing the request according to Subsection I, Article 128 of the Penal Code. However, the last judge denied authorization on the grounds that the matter was a medical rather than a legal decision. Another example of this kind of situation can be found in the vote of another judge:

It is impossible to grant legal authorization for abortion, just as it is impossible to grant legal authorization for legitimate protection of life or necessity. It is the agent [doctor] who must assess the situation and act in accordance with his or her own best judgment. (Case no. 7, Appeals Court Judge C, 2003.)

As far as these magistrates are concerned, then, it is the doctor's responsibility to evaluate the patient's health condition, and, if deemed necessary, carry out the procedure – given that the Penal Code already provides for exculpation in the case of necessary abortion. The question may also be raised whether medical doctors are not shirking their responsibility for these decisions, since in this and in other cases, the risk of death justifies the abortion of non-viable fetuses based on the Penal Code's Subsection I, Article 128 – thus waiving legal authorization. It is interesting to observe how in the case of a woman pregnant with a normal fetus who did run a risk of dying, tried in 2003, authorization for abortion was unanimously denied by the TJRS magistrates. Despite presenting a clinical picture warranting therapeutic abortion according to the Penal Code, her doctors thought that the request should be legally authorized, while the magistrates argued that only the doctors could make the kind of decision involved. Another informant further remarked:

I don't know why it has to go all the way to the courts. If the doctor is so sure that someone is dying that he'll remove organs from their body, why can't he remove a fetus that has no prospect of living without the need for authorization? (Eduardo, Magistrate.)

Diniz et al. (2009) note that a legal order is required to abort a non-viable fetus in Brazil's public health system. However, this does not necessarily apply to private prenatal services where abortion is not conditional on legal authorization. One of the magistrates I interviewed added:

...I would authorize abortion under several circumstances. One of them is necessary abortion, where the doctor performs the abortion without the need for authorization. Maybe that's why this stance is more rigid in terms of the view that it's only in the case of a risk of death. Perhaps the doctors feel a bit uncertain, but that's what the law states: the doctor is responsible, there's no better judge than the doctor, because otherwise the judge will be putting himself in the doctor's shoes (...) So I think this kind of request was made precisely for the doctor to safeguard himself from any risk, I mean, it's a kind of protection. But that's not what the law is there for, otherwise everyone would go to the courts in any circumstance, and clear themselves from any responsibility. (Antônio, Magistrate.)

This interviewee claims that authorization for abortion is deployed as a protective measure so that physicians can carry out an 'illegal' procedure without being held responsible for their action in the future. Some informants seem eager to draw a clear line between the responsibilities of the medical and legal fields in such a slippery terrain as the abortion of nonviable fetuses, which is not limited to one area of expertise. It seems as though some magistrates would rather yield any decision-making power to physicians, and vice-versa. One of the doctors I interviewed said that he had been summoned in two cases requesting authorization for the abortion of anencephalic fetuses. On one of these occasions

(...) it turned quite sour because the prosecutor said, 'You want to cover your backside and leave it to us, so you don't have to bother.' A quarrel ensued and I said 'I just want to comply with the law,' and he replied, 'no, because if this was a private clinic you'd just do it and not say anything about it.' It was quite an ugly spat. (Carlos, gynecologist-obstetrician, Hospital D and private clinic.)

The informant in question argued that since the law does not provide for the abortion of anencephalic fetuses, the procedure cannot be performed without legal authorization. On the other side, the prosecutor claimed that doctors are exempting themselves from a responsibility which is by law theirs, and that were the same situation to have occurred in a private clinic, the abortion would have been carried out regardless of legal authorization.

It should be remarked that, in most cases, the magistrates are not opposing the abortion request itself, but rather affirming the legal provision that when the pregnancy poses a risk to the mother's life, the doctor may act without the need for legal intervention. If the case is rejected, the magistrates 'wash their hands,' the doctors have their 'hands tied,' and the woman is forced to take the pregnancy with a non-viable fetus to full term. Even a magistrate who approved all requests for aborting non-viable fetuses contended that the purpose of obtaining such authorizations is to protect the doctors:

The doctors could perform the abortion, therefore, but they are afraid to, because they could only do it [legally] in order to save the woman's life or in the case of rape. But then, can you imagine if he performs the abortion at the patient's request, and then there is some complication and she dies during the procedure, then the family comes along... so, doctors want authorization because there are no grounds for arguing that

performing an abortion in the case of anencephaly is not a crime: technically it is.

But it is not up to us to provide this authorization, otherwise the wheels won't turn.

(Milton, Magistrate.)

According to this informant, doctors must decide on abortion in these cases. However, they have no legal grounds for performing the procedure, so they transfer the decision to someone else (the magistrate). It is clear how this kind of decision troubled all my informants, magistrates and doctors alike, such that each group tried to hand responsibility over to the other. This behavior was found even among those generally favorable to the abortion of anencephalic fetuses.

### Behind risk: disputes between the medical and legal fields

The obvious unease about who takes responsibility for the decision is caused, firstly, by the fact that the procedure at stake is indeed an abortion, and therefore carries with it the weight of a Christian morality deeply ingrained in a society that criminalizes this practice. Secondly, there seems to be a dispute between the medical and the legal fields over the abortion of non-viable fetuses. This struggle surfaces, for instance, in the way that the notion of risk is deployed in the legal field, as evinced in the statement by a magistrate cited earlier, affirming that the case 'only' contained the opinion of two doctors – thus delegitimizing medical opinions on anencephaly. It was also notable how magistrates selectively deploy the content of medical reports, such as in the case where authorization was rejected, in spite of medical recommendation, on the grounds that, in the magistrate's opinion, the pregnant woman did not show any 'significant' increase in amniotic fluid.

On the other hand, some of the physicians I interviewed argued that one major obstacle for obtaining legal authorization for aborting anencephalic fetuses has been the bad faith of those judging the case. One of the doctors also stated that,:

I'll tell you this: if the judge had an anencephalic fetus, would he continue with the pregnancy? I'm certain he wouldn't! No doubt about it. But because it's someone else's problem... (Ana, gynecologist-obstetrician, Hospital D.)

In this sense, while magistrates may regard doctors as prone to act 'unethically,' the latter often accuse the former of issuing biased, and in some cases

'unfair,' decisions. Authors like Darmon (1991), Carrara (1998) and Rohden (2003) have shown how accusations and disputes between medical doctors and magistrates are far from new: in fact, they have been commonplace since the advent of the figure of the medical expert working in the legal system.

This means that when the two fields are called upon to act in concert, medical discretion is limited by legal powers. To understand the disputes identified in my data, it is necessary to go over some of the aspects of how the medical and legal fields were constituted.8 The data shows that science plays a prominent role when it comes to the abortion of non-viable fetuses. The notion on which moral authorization for abortion is based in these cases is fetal non-viability, which is backed by scientific advances, especially in the field of prenatal diagnosis. In this sense, the medical field has 'hard' and 'precise' scientific evidence to affirm fetal non-viability. This diagnostic method, as well as estimates of the fetus's life expectancy, are based on rational, ordered, systematized and validated knowledge - that is, on scientific assumptions. This guarantees the recognition and legitimacy of medical knowledge concerning fetal non-viability included in the medical reports submitted in support of legal cases requesting abortion. However, my data shows that some magistrates are not persuaded by medical knowledge on fetal non-viability, nor by the very definition of fetal non-viability. The legal field is not directed by science, but by interpretation and subjectivity, as Durkheim underlined:

Law rests, then, on both objective and subjective causes at once. It is not only relative to the physical environment, to the climate, the number of inhabitants, etc., but even to preferences, to ideas, to the normal culture of a nation. This is why it is changeable and why something is required in one place and prohibited in another (1993: 82).

Evidence is crucial for any trial, yet in the legal field there is no scientific method for producing evidence or guiding decisions. In other words, the outcome of any trial is a moral decision. In this sense, the first difference between the legal and medical fields is that the practices of the former are guided by morals, those of the latter by science. This is the first source of the

<sup>8</sup> A full account of how these two fields were constructed would require another article. Here I consider only those elements central to making sense of the disputes found in my data.

disputes found in our data: morality versus science. This observation helps explain why the physicians interviewed are mostly favorable to the abortion of non-viable fetuses (even those who are against the abortion of other fetuses), while magistrates who oppose abortion in general also oppose the practice in the case of non-viable fetuses (even when they acknowledge that these fetuses will be unable to survive outside the womb).

My data suggests that the medical and legal fields influence each other, but also that this mutual influence is asymmetric. The medical field influences the legal field insofar as, most of the time, the magistrates accept the medical reports appended to cases requesting the abortion of nonviable fetuses. This is a positive influence, therefore, since the legal field is deploying knowledge produced by another field in order to do its job. The legal field, for its part, influences the medical field by controlling it, determining whether a given medical practice is within legal bounds or not – a negative kind of influence, therefore. One example outside the issue of abortion is litigation for medical malpractice. Albeit not part of this study, these were not forgotten by the doctors I interviewed, as we find in the following statement:

I believe one exam is not enough. I usually forward it to other doctors, ultrasound experts whom I trust. In order to protect myself, you know, because here we're in this tricky area of medical litigation. (...) Today, there's an over-emphasis on preserving the fetus. There's this specter of legal action, malpractice for instance – in the past, we would assist vaginal childbirth, but today it's C-section. (Ronaldo, gynecologist-obstetrician, Hospitals A and B.)

The medical field has less refractive power, therefore, and so less autonomy because it cannot evade the law. The legal field, in turn, can perform its functions unperturbed, based solely on its own concerns: laws and morality. The autonomy of the fields is a second difference emerging from my data, and also a motive of dispute between the two.

Finally, another difference between the medical and legal fields worth highlighting is that medicine is located at the action end of the scale, and the judiciary at decision end. Even though medicine is based on scientific knowledge, enjoys broad public recognition and influences social life, it does not hold decision-making power – it can only implement or recommend action.

This is perhaps the sharpest point of dispute between the two fields, since magistrates are deciding on issues generally recognized as belonging to the medical domain.

To summarize the argument made by one of the magistrates: physicians require legal authorization to carry out the abortion of non-viable fetuses because, technically speaking, they have no authority or legal backing to make this decision on their own. From this viewpoint, when some magistrates assert that it is up to doctors to decide whether or not to abort non-viable fetuses, they are not abstaining from a decision by transferring responsibility to the doctors. Behind this claim is the view that it is the doctor's responsibility to ascertain whether the risk is supported by law and, if so, to act accordingly – otherwise it would be considered an 'elective' abortion and thus criminal and non-'authorizable.'

### **Concluding remarks**

According to Freidson (1970), the social recognition of medical doctors' authority to treat issues concerning health and the body made medicine a 'moral enterprise,'9 capable of actively intervening in the social definitions of health and sickness, normality and abnormality, valid in any context. Commenting on the importance of medicine in our society, Simone Novaes and Tânia Salem (1995) remarked that, through their social legitimacy, medical doctors impose standards and guidelines for solving their patients' health problems. Their expert knowledge has shaped and defined how conflicts – frequently engendered by advances in medical technologies – can be solved. The scientific field is separate and independent of the medical field, yet the latter relies on the former to develop its practices – thus science becomes integral to medicine. The legal field, for its part, has no scientific basis, but is grounded instead on morality. Though different, the two fields

<sup>9</sup> According to Freidson: "Medicine [...] is oriented to seeking and finding illness, which is to say that it seeks to create social meanings of illness where that meaning or that interpretation was lacking before. And insofar as illness is defined as something bad – to be eradicated or contained – medicine plays the role of what Becker called the 'moral entrepreneur.' Medical activity lead to the creation of new rules defining deviance; medical practice seeks to enforce those rules by attracting and treating the newly defined deviant sick" (1970:252). When defining illness, medicine classifies peoples as normal or abnormal – and this is where its 'morality' resides, in the act of conceiving illness as deviance, and the patient as a deviant. Moreover, although it condemns the disease rather than the patient, the latter may be held responsible for his or her condition.

may influence each other (Bourdieu 1996, 2007a). Insofar as the claims advanced by magistrates favorable to the abortion of non-viable fetuses are intended to authorize this procedure, the medical field becomes a source of supporting evidence – for instance, through innovations in prenatal diagnoses and the trustworthiness with which science imbues them. In this sense, even though these magistrates acknowledge that the risk involved in pregnancies of non-viable fetuses is virtual, most of them consider fetal non-viability to be an unquestionable fact – hence, there is no sense in taking this kind of pregnancy to full term. This kind of medical justification is further compelled by the centrality of the notion of risk in modern society (Rabinow 1996, Rose 2007). In most cases, requests were granted, and a risk-based discourse was deployed as moral justification for authorizing the abortion of non-viable fetuses as a medical decision and thus factual and necessary.

Nevertheless, my data also shows that fetal non-viability by itself is insufficient to authorize abortion. Abortion has to be justified morally. To agree that a woman may carry out an abortion 'just' because the fetus is non-viable amounts to recognizing that the woman's wish forms part of that choice, and this usually is not sufficiently persuasive. Authors such as Wiese and Saldanha (2014) and Porto (2009) have demonstrated the generally negative view that medical doctors and legal experts have concerning selective abortion, which explains why these professionals discriminate against women who undergo clandestine abortions. Consequently, the chief argument made by informants to justify the abortion of non-viable fetuses was the risk that this kind of pregnancy poses to the woman's health. The study found that both physicians and magistrates significantly manipulate the category of risk, since, as the interviewees affirmed, pregnancy with a non-viable fetus does not imply absolute risk. Instead, risk is a prognosis that may or may not be actualized. In other words, danger to the woman's life is a possibility rather than an inevitability in this kind of pregnancy. When informants resort to the rhetoric of risk, therefore, in order to render the abortion of non-viable fetuses morally acceptable, their aim is to distance abortion from the domain of the woman's individual choice by framing the intervention as a therapeutic abortion, recommended by the doctors as a procedure to safeguard the patient's health. Though flexible, the category of risk is scientific: risk can be identified, classified, measured.

Another point to be emphasized is the polyvalent nature of the discourses employed to justify decisions on the abortion of non-viable fetuses. Regardless of their eventual stances, all magistrates took the notion of risk into consideration when framing their decisions. Risk-based rhetoric is deployed both to affirm the need for abortion and to remove the abortion of non-viable fetuses from the provisions for legal abortion, as well as to attribute responsibility for decision-making to physicians. My data showed that even though the magistrates' views on the abortion of non-viable fetuses are linked to fetal non-viability and the sacredness of life, legal decisions have to adopt justifications that are compatible with the legal framework. Claims made in legal decisions as formal arguments must always draw on the law and its interpretation. Thus, risk – which may translate into therapeutic abortion – is the argument that makes most sense in the legal field in order to ground decisions on the abortion of non-viable fetuses.

Behind the flexibility in the notion of risk observed in my data is a tension between the medical and legal fields concerning the abortion of nonviable fetuses. Both are hegemonic fields in our society, capable of establishing socially recognized norms and truths. But does one of them enjoy more legitimacy than the other? The answer has to be yes. At least when it comes to fetal non-viability, this study showed that the medical field is constrained by the legal field. While the medical field is about action, the legal field is about decision making. Decisions made in the latter are valid for all other fields: hence physicians' actions have to comply with legal decisions. Before the Supreme Court ruling on anencephaly, medical doctors were responsible for diagnosing the problem and recommending a procedure – abortion – for treating it. But the final word on what was to be done belonged to the magistrate, who would provide a judgment based on the law. Hence, it was up to the magistrate to decide whether the abortion of an anencephalic fetus was correct, ethical or moral, and the physician had no option but to comply with this decision. My data showed that in some cases medical reports on the abortion of anencephalic fetuses were entirely ignored by the magistrates, who evaluated the requests in accordance with their own views. When it comes to an encephaly, though, the tensions between the medical and legal fields are not limited to controls on medical practice. Decision-making on the abortion of non-viable fetuses seems to be marked by uneasiness between physicians and magistrates, with each side trying to shift responsibility over

to the other. This suggests that neither medical doctors nor magistrates are at ease with the decisions and actions surrounding abortion.

Finally, it should be mentioned that, even after Brazil's Federal Supreme Court ruled in favor of the abortion of anencephalic fetuses, other cases of fetal malformations continue to be judged on a case-by-case basis. Lack of consensus on the morality of aborting non-viable fetuses is likely to persist in struggles between the medical and legal fields.

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#### References

- AYRES, José Ricardo de Carvalho Mesquita. 2002. "Epidemiologia, promoção da saúde e o paradoxo do risco". Revista Brasileira de Epidemiologia, 5(supl. 1): 28-42.
- \_\_\_\_. 2011. "Desenvolvimento histórico-epistemológico da epidemiologia e do conceito de risco". *Cadernos de Saúde Pública*, 27(7): 1301-1311.
- BECK, Ulrich. 1993. Risk society: towards a new modernity. Cambridge: Polity Press.
- BOURDIEU, Pierre. 1996. Razões práticas sobre a teoria da ação. Campinas: Papirus Editora.
- \_\_\_. 2005. A economia das trocas simbólicas. São Paulo: Perspectiva.
- \_\_\_\_. 2007a. O poder simbólico. Rio de Janeiro: Bertrand Brasil.
- \_\_\_\_. 2007b. El sentido práctico. Buenos Aires: Siglo XXI Editores.
- CARRARA, Sérgio. 1998. Crime e loucura: o aparecimento do manicômio judiciário na passagem do século. Rio de Janeiro: EdUERJ/ São Paulo: EdUSP.
- CHAZAN, Lilian Krakowski. 2007. "Meio quilo de gente": um estudo antropológico sobre ultrassom obstétrico. Rio de Janeiro: Editora Fiocruz.
- DARMON, Pierre. 1991. Médicos e assassinos na Belle Époque. Rio de Janeiro: Paz e Terra.
- DINIZ, Debora. 2001. "Um espelho das moralidades: o debate sobre aborto no Congresso Nacional Brasileiro". *Série Anis*, 23: 1-3.
- \_\_\_\_. 2003. "Quem autoriza o aborto seletivo? Médicos, promotores e juízes em cena". PHYSIS. Revista de Saúde Coletiva, 13(2): 13-34.

- \_\_\_\_. et al. 2009. "A magnitude do aborto por anencefalia: um estudo com médicos". Ciência & Saúde Coletiva, 14(1): 1619-1624.
- DOUGLAS, Mary. 2002. Purity and danger. New York: Routledge.
- DURKHEIM, Émile. 1993. Ethics and the sociology of morals. Buffalo, NY: Prometheus Books.
- FABRI, Renato Humberto et al. 2002. "Estudo comparativo das indicações de cesariana entre um hospital público-universitário e um hospital provado". Revista Brasileira de Saúde Materno Infantil, 2(1): 29-35.
- FAÚNDES, Aníbal; CECATTI, José Guilherme. 1991. "A operação cesárea no Brasil. Incidências, tendências, causas, consequências e propostas de ação". *Cadernos de Saúde Pública*, 7(2): 150-173.
- FAÚNDES, Aníbal et al. 2004. "Opinião de mulheres e médicos brasileiros sobre a preferência pela via de parto". Revista de Saúde Pública, 38(4): 488-494.
- FOUCAULT, Michel. 1990. "Method". In: *The history of sexuality an introduction*. New York: Vintage Books. pp. 92-102.
- FREIDSON, Eliot. 1978. La profesión médica. Barcelona: Ediciones Península.
- HADDAD, Samira El Maerrawi T.; CECATTI, José Guilherme. 2011.

  "Estratégias dirigidas aos profissionais para a redução das cesáreas desnecessárias no Brasil". Revista Brasileira de Ginecologia e Obstetrícia, 33(5): 252-262.
- LATOUR, Bruno. 1987. Science in action. Harvard: Harvard University Press.
- LUIZ, Olinda do Carmo; COHN, Amélia. 2006. "Sociedade de risco e risco epidemiológico". *Cadernos de Saúde Pública*, 22(11): 2339-2348.
- NEVES, Ednalva Maciel. 2004. Alquimia moderna: cultura e racionalidade do risco entre epidemiologistas. Ph.D thesis, Postgraduate Program in Social Anthropology, Federal University of Rio Grande do Sul.
- NOVAES, Simone; SALEM, Tania. 1995. "Recontextualizando o embrião". *Estudos Feministas*, 3(1): 65-88.
- PORTO, Rozeli Maria. 2009. Aborto legal e o cultivo ao segredo: dramas, práticas e representações de profissionais de saúde, feministas e agentes sociais no Brasil e em Portugal. Ph.D thesis, Social Anthropology, Federal University of Santa Catarina, Brazil.
- RABINOW, Paul. 2002. "Artificialidade e iluminismo: da sociobiologia à biossociabilidade". In: *Antropologia da Razão*. Rio de Janeiro: Relume Dumará. pp. 135-157.

- ROHDEN, Fabíola. 2003. A arte de enganar a natureza: contracepção, aborto e infanticídio no início do século XX. Rio de Janeiro: Editora Fiocruz.
- ROSE, Nikolas. 2007. The politics of life itself: biomedicine, power, and subjectivity in the twenty-first century. Princeton: Princeton University Press.
- SPINK, Mary Jane P. 2001. "Trópicos do discurso sobre o risco: risco-aventura como metáfora na modernidade tardia". *Cadernos de Saúde Pública*, 17(6): 1277-1311.
- VÍCTORA, Cesar G. et al. 2011. "Maternal and child health in Brazil: progress and challenges". *The Lancet*, 377(5): 1863-1876.
- WIESE, Iria Raquel Borges; SALDANHA, Ana Alayde Werba. "Aborto induzido na interface da saúde e do direito". *Saúde e Sociedade*, 23(2): 536-547.
- WORLD HEALTH ORGANISATION. 1985. "Appropriate technology for birth". *The Lancet*, ii: 436.
- YAZLLE, Marta Edna Holanda Diógenes et al. 2001. "Incidências de cesáreas segundo fonte de financiamento da assistência ao parto". Revista de Saúde Pública, 35(2): 202-206.

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