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# Contemplating abortion: HIV-positive women's decision to terminate pregnancy

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# Abstract

Research on pregnancy termination (PT) largely assumes HIV status is the only reason why HIVpositive women contemplate abortion. As antiretroviral treatment (ART) becomes increasingly available and women are living longer, healthier lives, the time has come to consider the influence of other factors on HIV-positive women's reproductive decision-making. Because ART has been free and universally available to Brazilians for more than two decades, Brazil provides a unique context in which to explore these issues. Twenty-five semi-structured interviews exploring women's PT decision-making were conducted with women receiving care at the Reference Centre for HIV/AIDS in Salvador, Brazil. Interviews were transcribed, translated into English, and coded for analysis. HIV played different roles in women's decision-making. 13 HIV-positive women did not consider PT. Influential factors described by those who did consider PT included fear of HIV transmission, fear of HIV-related stigma, family size, economic constraints, partner and provider influence, as well as lack of access to such services as PT and abortifacients. For some HIVpositive women in Brazil, HIV can be the only reason to consider PT, but other factors are significant. A thorough understanding of all variables affecting reproductive decision-making is necessary for enhancing services and policies and better meeting the needs and rights of HIVpositive women.

## Keywords

pregnancy termination; abortion; HIV/AIDS; Brazil

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# Introduction

The advent and increased accessibility of antiretroviral treatment (ART) has significantly impacted on HIV-positive women's and men's decisions regarding conception, pregnancy continuation and elective pregnancy termination (PT). (Boonstra 2006; MacCarthy et al. 2012) With access to ART prophylaxis and treatment, HIV-positive women who wish to become pregnant can undergo labour, delivery and breastfeeding with greatly reduced risk of vertical HIV transmission.(Mazzeo et al. 2012) Some researchers, programmers and policymakers historically assumed that HIV-positive women would (or should) attempt to avoid pregnancy altogether or terminate pregnancies solely on the basis of their HIV-positive status. Although global or regional epidemiological data on abortion is not commonly disaggregated by HIV status (World Health Organization 2011), studies focused on HIV-positive women in Vietnam (Bui et al. 2010), South Africa (Cooper et al. 2007), the USA (Massad et al. 2002; Greco et al. 1999) documented a substantial decrease in the rate of PT following the availability of ART.

The World Health Organization (WHO) established in 2006 that both surgical and medication (or "medical") abortions are safe for HIV-positive women when performed under certain conditions. (World Health Organization and United Nations Population Fund 2006) Still, access to abortion services for HIV-positive women remains either limited or altogether absent in many countries across the globe.(Boonstra 2006; World Health Organization and United Nations Population Fund 2006) While HIV-positive and HIV-negative women experience limited access to safe abortion procedures globally, the consequences of unsafe abortion may be more severe for women living with HIV than their HIV-negative counterparts given their heightened risk for infection, sepsis and haemorrhage. (de Bruyn 2003; Delvaux and Nostlinger 2007)

In Brazil, where ART has been free and universally available for almost 20 years, HIV status may be an important factor in women's decisions to continue or terminate a pregnancy. (Barbosa et al. 2012) Despite Brazil's progressive national response to HIV, however, the links between pregnancy termination and persistently high maternal mortality - which has not improved in 15 years – have not been addressed by public health policies. (Diniz 2007) The Brazilian penal code has limited access to legal abortion services for Brazilian women since 1940, and abortion-related health complications accounted for 11.4% of maternal mortality in 2004 (not disaggregated by HIV status). (Laurenti, Mello Jorge, and Gotlieb 2004) In 2012, the Supreme Court of Brazil ruled that a woman is exempt from criminal penalities for seeking an abortion only when her life is in danger, when pregnancy results from rape, or when the foetus has severe genetic abnormalities.(Human Rights Watch 2012) Women wishing to terminate a pregnancy for any other reason must seek services outside the formal health system, potentially resulting in unsafe procedures. (Goldman et al. 2005) Furthermore, hospitals require court rulings to proceed with pregnancy terminations, and the ensuing legal process often delays abortion beyond the first or second trimester. Some women additionally avoid seeking post-abortion care for fear of arrest or imprisonment. (Menezes and Aquino 2009)

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Research conducted in Brazil has the potential to provide unique insight into the determinants of reproductive decision-making among HIV-positive women in the context of universal access to ART. To date, the impact of HIV on abortion in Brazil is unclear: initial evidence from data collected in 2003 and 2004 suggested that after controlling for several factors, there were not statistically significant differences between the rates of abortion among HIV-positive women and HIV-negative women. (Barbosa et al. 2009; Santos NJS, Barbosa RM, and Pinho AA 2009) These studies, however, did not explore the reasons informing why women sought to terminate their pregnancy. Two recent studies based on data from 2009 and 2010 revealed that a myriad of determinants are shared across HIV-positive and HIV-negative women. (Barbosa et al. 2012; Villela et al. 2012) To better inform the ways in which services and policies can meet the sexual and reproductive needs and rights of HIV-positive women in Brazil and more globally, we conducted a qualitative study to further explore the role of HIV in reproductive-decision making among 25 HIV-positive women in Salvador, the third most populous and one of the poorest cities in Brazil. (Instituto Brasiliero de Geografia e Estatistica 2005)

# Methods

Qualitative data were collected in semi-structured interviews with 25 HIV-positive women who knew their HIV status, currently or previously had planned or unplanned pregnancies, and who were receiving HIV-related care at the only State Reference Centre (SRC) for HIV/AIDS in Salvador, Brazil. All interviewers received training related to HIV and AIDS, and interview scripts were extensively field-tested. Researchers (SM and ID) met weekly with study staff to review pilot interviews, ensuring clarity of questions asked and quality of information collected.

Employing a convenience sampling strategy, women with scheduled appointments at the SRC were approached by the interviewers. Women who gave informed consent to participate were interviewed in a private room. All interviews were conducted individually and recorded. They were later transcribed and professionally translated from Portuguese into English for analysis.

Transcripts and related field notes were evaluated, and researchers identified deductive codes following a review of the literature. Next, inductive codes were used to identify new factors in the transcripts that may not have been highlighted by the existing literature. As categories emerged, data was pulled from relevant categories and compared. The relationships among categories were specified and outliers were explored. Finally, exemplars were identified to further illuminate the key themes emerging from each interview. Data was reviewed and discussed by three authors (SM, JR and ACR), and conclusions were reviewed by an additional author (ID) to ensure consistency with the Brazilian cultural context.

# Results

Table 1 summarises the demographic characteristics of study participants. The results, detailed in Figure A, demonstrate that a continuum of experiences exists between women who did not (n=13) and those who did (n=12) consider PT.

#### HIV-positive women who did not consider abortion

Approximately half of respondents never considered abortion as an outcome for their pregnancies (n=13). While two women did not explain their rationale for not considering abortion, eight women stated that the pregnancy was desired, even if unplanned. Three objected to abortion on religious grounds: As Sandra, age 35, explained: "... I saw what I would be doing [if I had an abortion]...practicing a sin...I would not have salvation!" Of those women who did not consider terminating their pregnancies, three explained that they did not fear vertical transmission, especially after they gained knowledge about strategies to reduce the risk of HIV transmission. HIV-related concerns were otherwise not significantly related to these women's wishes to continue their pregnancies.

#### HIV-positive women who did consider abortion – the role of HIV

Of the 12 women who did consider terminating their pregnancies, three women stated that their positive HIV status did not affect their desire to terminate their pregnancies. In contrast, five women contemplated this option solely on the basis of HIV-related concerns, particularly out of fear of vertical transmission during pregnancy or childbirth. Andrea, age 23, stated: "[My biggest worry] was of the child being infected...So much so that I even thought about [terminating the pregnancy]." In addition to their fear of vertical transmission, other HIV-related concerns included the potential stigma an HIV-positive child would endure during its life. Again Sandra explained: "I thought it would be just another child to suffer prejudice. Because people are prejudiced!"

#### HIV-positive women who did consider abortion - the role of other factors

Four women considered abortion because of the aforementioned HIV-related concerns in addition to other factors, such as desired family size; economic status; partner influence; provider influence; and the lack of affordable, accessible, and available abortion services. Many of these determinants were also considerations for HIV-positive women who did not consider abortion, serving as rationale to continue a pregnancy for some women while leading other women to consider abortion.

Desired family size was a significant concern for two HIV-positive women, influencing one participant to consider abortion because she was satisfied with her family size while encouraging another to continue her pregnancy because her desire to have more children outweighed fears of HIV transmission.

Economic worries affected the decision-making of five women: Many interviewees struggled to provide for current children and expressed concern over meeting the financial needs of another child. As Maria, age 31, remarked, "I already have a hard time taking care of this one, imagine another one."

Partners' preferences and behaviours played an important role in many women's decisions around abortion (n=8). Like women's preferences, partners' personal preferences regarding abortion varied: some partners were personally in favour of abortion, while others opposed it. Of note, the ways in which partners expressed their personal opinions and desires for continuing or terminating the pregnancy ranged from supportive to coercive, along a spectrum (see Figure B).

While some partners were uninvolved or apathetic, some actively supported women in their decision (either to continue or terminate the pregnancy). Other partners, however, forcefully expressed their opinions about the pregnancy outcome, misleading or even coercing female participants into either having an abortion or continuing their pregnancy. For instance, when asked about her pregnancy, Sandra replied:

"I did not [want the pregnancy]. I wanted to take it out, I wanted to abort. And [my partner] promised me: 'Let's wait two months because it's easier to get the baby out.' Except he was lying to me...everyone knows that when you wait for two full months it is already a risk to end the pregnancy...he always wanted this pregnancy."

The status or stability of a woman's relationship with her partner also influenced her reproductive decision-making. One woman's desire to continue her pregnancy was explicitly motivated by the possibility that having a child with her partner would strengthen their relationship. In contrast, another respondent considered terminating her pregnancy because the child was not her partner's. Women additionally referenced their partners' involvement and responsibility, or lack thereof, when weighing their decision to continue or terminate a pregnancy.

Service providers influenced the pregnancy decision-making of three women. In this study, health care providers uniformly encouraged women to continue their pregnancies. Providers not only informed pregnant HIV-positive women about methods to prevent vertical transmission but in some cases actively discouraged abortion. One health provider, for example, reportedly counselled an HIV-positive woman not to "think about any stupidity," by which he meant abortion:

Patricia (age 35): "[The doctor] said, 'Bring [the pregnancy test] to me as soon as you get the result...don't you think about any stupidity, no...you, like any other woman, can have a baby... It cannot be a natural birth. It has to be a C-Section... you cannot breastfeed, but there is the milk'. He then kept [saying to] me: 'Don't you think about any stupidity, nothing."

The lack of available, acceptable and accessible abortion services also affected women's pregnancy decisions (n=4). One woman who otherwise favoured abortion decided against termination out of fear of acquiring a bacterial infection during the procedure. Three participants who decided to terminate their pregnancy sought abortion services but were subsequently unable to access services or the pharmaceuticals to terminate their pregnancies. One woman described trying "Twice...I made some tea...I [drank the] tea and...I did everything but could not [abort]."

# Discussion

Approximately half of the women included in this study did not consider abortion upon learning they were pregnant. These women expressed a desire to carry their pregnancies to term and cited religious beliefs and/or lack of concern for vertical transmission as reasons to continue their pregnancies. These responses, which have been documented in Brazil and other settings (Chi et al. 2010; Cooper et al. 2007; Ingram and Hutchinson 2000; Hebling and Hardy 2007), may reflect the relative social value placed on children and motherhood. The decision to continue a pregnancy by women who were unconcerned about vertical transmission more likely reflects the impact of information and counselling on preventing vertical transmission that women received rather than any lesser or lack of concern for the health of their infants. (MacCarthy et al. 2013)

Women who did not consider abortion either explicitly noted that their decisions were not motivated by HIV or did not mention HIV as influencing their choices. These results also corroborate prior research (Smits et al. 1999; Johnstone et al. 1990; Kline, Strickler, and Kempf 1995; Orner, de Bruyn, and Cooper 2011; Barbosa et al. 2009), suggesting that, among women who wish to continue a pregnancy, HIV-related concerns are minimal compared to desires for children and/or religious stances against abortion.

On the other hand, HIV was either the only reason or one of several reasons that three quarters of women contemplated abortion. HIV and the risk of vertical transmission to their infants and/or fear of the subsequent stigma experienced by HIV-positive infants were significant concerns, but other women were motivated to consider abortion because of other factors in constellation with these HIV-related concerns. This finding corroborates other studies that have documented HIV/AIDS as a prominent or primary motivation for considering abortion,(Craft et al. 2007; Lindgren et al. 1998; Bui et al. 2010; Bedimo, Bessinger, and Kissinger 1998) or as one of several influences.(Cooper et al. 2007; Kirshenbaum et al. 2004; Orner et al. 2010; Kanniappan, Jeyapaul, and Kalyanwala 2008; Floridia et al. 2010)

A perceived inability to meet the financial needs of a child as well as women's partners' preferences were major considerations for HIV-positive women weighing up whether to continue or terminate a pregnancy. Other studies have documented that economically dependent women are more likely to be influenced by family and partner preferences. (Bedimo, Bessinger, and Kissinger 1998; Kanniappan, Jeyapaul, and Kalyanwala 2008; Chi et al. 2011; Lindgren et al. 1998; Orner et al. 2010; Orner et al. 2011; Villela et al. 2012; de Bruyn 2004, 2006)

Among HIV-positive women that did not consider abortion as well as women who did, partner and health provider preferences were important determinants of pregnancy intentions. As depicted in Figure B, regardless of their actual preference (e.g. to continue or terminate the pregnancy), male partners' behaviours ranged from being supportive to neutral or coercive in expressing their preference. These findings support pre-existing research documenting the partner's influences on women's sexual and reproductive health and decision-making.(Barbosa et al. 2009; Villela et al. 2012; Menezes and Aquino 2009)

Health care providers in this study uniformly encouraged women to continue their pregnancies and proactively educated women about the prevention of vertical transmission. Health care providers in Brazil and other contexts have reportedly misinformed or coerced pregnant HIV-positive women to terminate their pregnancies or undergo sterilisation (Orner et al. 2011; Cooper et al. 2007; Hopkins et al. 2005; International Community of Women Living with HIV/AIDS 2008). Given this reality, the fact that health care providers in our study gave accurate medical information on preventing vertical transmission to HIV-positive women is promising. Still, especially in light of the surrounding political legal context, Brazilian health providers may inadvertently or intentionally constrain women into continuing their pregnancies if education on preventing vertical transmission pre-empts an attempt to explore and facilitate women's own pregnancy intentions.

The health system and greater health policies also play a role in shaping pregnancy outcomes for HIV-positive women, ultimately enabling, complicating or entirely precluding HIV-positive women's access to safe abortion. Indeed, the lack of available, accessible and acceptable abortion services prevented some participants from successfully terminating their pregnancies, despite their desire to do so. There is broad support for the integration of HIV treatment and care with reproductive health services across health systems, but these discussions have largely neglected the delivery of abortion services even where it is legal. (Cooper et al. 2009; Gruskin et al. 2008)

Finally, some women who considered abortion worried about HIV-related stigma directed toward themselves or their infants while others who did not consider abortion were concerned with abortion-related stigma. In this setting and others, concurrent and competing stigmas related to HIV and to abortion complicate reproductive decision-making amongst HIV-positive women (Bui et al. 2010; Orner, de Bruyn, and Cooper 2011; Orner et al. 2010; Orner et al. 2011; Cooper et al. 2007; de Bruyn 2004; Craft et al. 2007; Ingram and Hutchinson 2000; Kavanaugh ML et al. 2013). Specifically, social norms that simultaneously stigmatise PT as well as people living with HIV and their becoming pregnant render any pregnancy decision by HIV-positive women socially unacceptable.

There are several limitations to this qualitative study. One limitation is the difficulty of assessing the relative weight and marginal contribution of each overlapping factor in women's reproductive decision-making. Furthermore, this study explored factors that promote or deter HIV-positive women from PT where ART is universally available. These results cannot be extrapolated to analyses of PT in contexts lacking access to ART - only with longitudinal data could such conclusions be reached. Finally, because some women were not pregnant at the time of the interviews, there may also have been some recall bias as women reflected on their reproductive decision-making at the time of their pregnancy, and the time between pregnancy and interview is unclear.

# Conclusion

This study explored the variable role of HIV in reproductive decision-making among HIVpositive Brazilian women. For some women, positive HIV status was the primary motivation for considering and seeking PT, whereas HIV was not a consideration in the

decision to continue or terminate a pregnancy for others – particularly for those who did not contemplate abortion. Most women, regardless of their overall pregnancy intentions, were more strongly influenced by the same factors that HIV-negative women might consider, including sociocultural predisposition against abortion, desired family size and partner preferences, rather than HIV itself.

Corroborrating recent research, these findings suggest that the role of HIV in reproductive decision-making among HIV-positive women is increasingly being outweighed by other considerations but cannot be consistently predicted. Whereas it was previously assumed that HIV was the only factor influencing HIV-positive women to seek PT, the relative importance of HIV status for reproductive decision-making is likely to decline over time in a setting where ART is universally available. This apparent shift in the role of HIV not only raises important research questions going forward and underscores the importance of collecting and disaggregating data by HIV status: Such data will be necessary to fully explore the impact of universal access to ART on reproductive decision-making over time.

Indeed, decisions to continue or terminate a pregnancy are at once personal choices that reflect complex and community-specific intersections of legal, political, social and biomedical spheres. Although HIV-positive women in this study had access to ART, many participants were limited in their ability to seek and obtain abortion, when desired. Access to ART notwithstanding, the array of available, accessible and acceptable sexual and reproductive health services including other essential medicines invariably shapes HIV-positive women's decisions to continue or terminate pregnancies – but to variable degrees, as this study reveals.

Abandoning the assumption that all HIV-positive women have similar pregnancy intentions is a necessary first step in providing sexual and reproductive health services and engaging in responsive policymaking that enable women to realise their decision to carry a pregnancy to term, or not.

In the future, public health researchers, providers and policymakers in Brazil and globally should anticipate that the determinants of pregnancy decisions are inter-related and context specific. Furthermore, women's experience with abortion cannot be examined without considering the legality of services and access to ARVs. If the sexual and reproductive health and rights of HIV-positive women are to be met, efforts should be re-oriented to support – rather than limit – women as they contemplate abortion.

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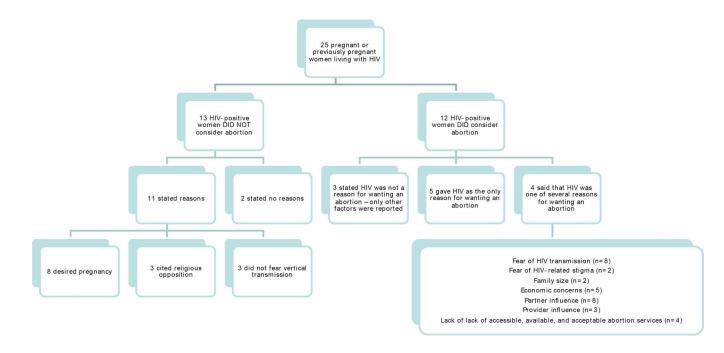
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#### Figure A.

Summary of Results from semi-structured interviews with 25 currently or previously pregnant women who were receiving HIV/AIDS care at the only Reference Centre for HIV/AIDS in Salvador, Brazil.

\*Many participants cited several reasons, reasons are thus non-exclusive within categories

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	Coercive		Neutral	Supportive	
Women expressed desire to carry pregnancy to term	A woman, who expresses desire to carry the pregnancy to term, is given medicine by her partner, which she pretends to take. After this apparent 'failed attempt' to abort, the partner hires someone to conduct the procedure at home.	A woman prefers to continue her pregnancy, but her verbally abusive partner wants the opposite; they end their relationship over this discord. She remarks that this was possible because she was economically independent from him.	One woman's partner is uninvolved in the decision.		A woman's partner is supportive of her and her decision to terminate her pregnancy. The partner goes with her to see an abortion provider.
Women expressed desire to terminate pregnancy	One woman's partner lies and leads her to believe that abortion services are best sought later in her pregnancy, at which point she was no longer able to terminate her pregnancy.		Two women wanted to terminate their pregnancies while their partners did not. These partners removed themselves from the decision- making process.		

# Figure B.

The ways in which partners expressed their personal opinions and desires for continuing or terminating a pregnancy ranged from supportive to coercive.

#### Table 1

Description of the demographic characteristics among women receiving HIV/AIDS care at the State Reference Center in Salvador, Brazil (n=25)

VARIABLES	п
Age	
Less than 24 years	5
25 – 34 years	13
35 and older	7
Color / Ethnicity*	
Brown	11
Black	11
Other	3
Civil status	
Married or live with someone	14
Single or divorced	11
Number of children	
1	6
2	8
3 or more	3
	4
Employment status	
Unemployed	19
Employed (formally or informally)	6
Monthly income of those working $^{**}$	
Minimum wage or below	4
Above minimum wage	2
Length of time since diagnosis with HIV	
Less than 1 year	12
Between 1 and 2 years	5
3 or more years	8
On treatment for HIV at the time of interview	
Yes	13
No	12

\*Race is commonly referred to as *cor* or 'color,' and references the phenotype (physical appearance) and not one's ancestry (origin).

\*\* Minimum wage of \$510 BR per month = \$328.11 USD per month as established by the Brazilian government

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