Male reproductive control of women who have experienced intimate partner violence in the United States

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Abstract

Persistent health, including reproductive health, disadvantages are found among women who have experienced intimate partner violence (IPV) (Bonomi, Anderson Rivara & Thompson, 2007; Coker, 2007). Yet the mechanisms through which these correlations occur has been poorly understood and conceptualized. We sought to explicate these mechanisms occur by capturing full reproductive histories of 71 women aged 18-49 with a history of IPV through face-to-face, semi-structured in-depth interviews. Respondents were recruited from a family planning clinic, an abortion clinic and a domestic violence shelter, each located in a large metropolitan area in the United States—one in the Midwest and two on the eastern seaboard. One of the proximal determinants of negative reproductive health which emerged from the respondents' narratives was reproductive control: Fifty-three respondents (74%) reported ever experiencing reproductive control. Reproductive control encompasses pregnancy-promoting behaviors as well as control and abuse during pregnancy in an attempt to influence the outcome of the pregnancy. Pregnancy-promotion are actions carried out by the partner with the intention of impregnating the woman. They include verbal threats about making the woman pregnant, unprotected forced sex, and contraceptive sabotage. Once pregnant, partners resorted to behaviors such as threats on the woman's life if the woman elected to have an abortion or threats of causing a miscarriage if the woman did not have an abortion. Reproductive control was present in violent as well as non-violent relationships demonstrating that while a history of IPV may predispose women to experiencing reproductive control, it is not only violent relationships which place women at risk of experiencing reproductive control. By screening women seeking reproductive health services for reproductive control, including during antenatal care, health care providers would be better able to provide care that is responsive to potential attempts at partner control to help women protect their reproductive health and physical safety.

Background

Intimate partner violence (IPV), that is having been hit, slapped, choked, kicked, physically hurt or threatened by a current or former partner, is associated with a range of general negative health outcomes including depression; suicidal ideation; chronic pain; post-traumatic stress disorder; and gynecological problems including abdominal pain, urinary problems, decreased sexual desire, and genital irritation (Campbell & Soeken, 1999; Campbell, Woods, Chouaf & Parker, 2000; Leiner, Comptom, Houry & Kaslow, 2008). The reproductive health correlates of IPV include unwanted pregnancy; women not using their preferred contraceptive method; sexually transmitted infections including HIV/AIDS; miscarriages; repeat abortion; a high number of sexual partners; and poor

pregnancy outcomes (Gazamararian, Adams, Saltzman, Johnson, Bruce, & Marks, et al., 1995; Campbell, 2001; Williams, Larsen and McCloskey, 2008; Campbell, Woods, Chouaf, & Parker, 2000; Center for Impact Research, 2000; Fisher, Singh, Shuper, Carey, Otchet, MacLean-Brine, et al., 2005; Coker, 2007; Jewkes, Dunkle, Nduna, Levin, Jama, Khuzwayo, et al., 2006; Stevens & Richards, 1998; Maman, Campbell, Sweat, & Gielen, 2000; Taggart & Mattson, 1996). Yet the mechanisms through which these poor reproductive health outcomes occur have been poorly understood.

The proximate determinants of unwanted pregnancy—forced sex and partner's unwillingness to use contraception—have been documented in relationships that include intimate partner violence (Campbell et al., 2000; Lathrop, 1998). Other partner behaviors that further undermine women's ability to prevent an unwanted pregnancy which have been previously identified include women's lack of negotiating power to insist on contraceptive use, abusive partners' interference with women's use of contraception, and partners' refusal to pay for contraception (Heise, Moore, & Toubia, 1995; Branden, 1998). While these behaviors all expose women to the risk of pregnancy, this body of work has not been focused on whether men's intentions were to make the woman pregnant. These behaviors could be motivated by the pursuit of sexual pleasure, sexual control or financial control.

Within violent relationships, an increase in violence during pregnancy has also been documented (Gielen, Faden, O'Campo, Kass & Xue, 1994), with a greater increase occurring when the pregnancy is unintended (Goodwin, Gazmararian, Johnson, Gilbert & Saltzman, 2000; D'Angelo, Gilbert, Rochat, Santelli, & Herold, 2004). This increase in violence could be a cause of miscarriages and poor pregnancy outcomes among women in violent relationships. Yet, again, the work carried out to date has not explicitly connected violence during pregnancy with the partner's desired outcome of the pregnancy.

Behaviors such as pregnancy promotion, birth control sabotage and preventing a woman from having an abortion explicitly demonstrate a partners' desire to impregnate a woman and once pregnant, to keep her pregnant, have emerged among small samples and specific sub-populations in different parts of the world (Campbell, Pugh, Campbell, Visscher, 1995; Campbell et al., 2000; Coggins & Bullock, 2003; Hathaway, Willis, Zimmer & Silverman, 2005; Miller, Decker, Reed, Raj, Hathaway, & Silverman, 2007; Watts & Mayhew, 2004; Wood & Jewkes, 2006). The Center for Impact Research has defined birth control sabotage as verbal or behavioral sabotage of the woman's use of birth control by her partner (2000). Other literature has shown that this sabotage can be direct (interfering with her contraceptive use) as well as indirect (causing her to fear violence if she does use contraception or even brings up the topic). For example, fear of partner violence has been cited by women as a barrier to condom use across a variety of settings (Blanc, Wolff, Gage, Ezeh, Neema & Ssekamatte-Ssebulia, 1996; Njovana & Watts, 1996; Watts & Mayhew, 2004; Wingood & DiClemente, 1997). Not all control is aimed forcing a partner to become pregnant and reproduce. Partner control aimed at constraining a woman's reproductive capacity through forced sterilization and forced abortion has also been documented (Hathaway et al., 2005). Yet drawing a connection

between these behaviors as various aspects of reproductive control has not yet been done in the literature.

While pregnancy-controlling behaviors are not exclusive to violent relationships, women experiencing IPV are at increased risk for experiencing reproductive control compared to other women (Center for Impact Research, 2000; Clark, Silverman, Khalaf, Ra'ad, Al Sha'ar, & Al Ata, 2008). In a study carried out with teen mothers accessing social services in Chicago, 66% who had been abused by their partner reported experiencing birth control sabotage as compared to 34% of those who had not experienced IPV (Center for Impact Research, 2000). This study also found a positive correlation between violence and the types of birth control sabotage experienced: in relationships with more violence, there was a greater probability of more types of birth control sabotage occurring as well[1].

Therefore, while many of the reproductive health correlates of IPV are known, and male control over various aspects of women's reproductive autonomy have been identified both to coerce childbearing as well as coerce a curtailment or an end to childbearing within as well as outside of physically violent relationships, there remains the gap of a broad conceptualization of these behaviors as a type of abuse. We posit that it is ideal for women to have reproductive autonomy which we use to mean that the woman has the ability to make independent decisions about her reproduction. We name abridgement of that autonomy *reproductive control*, which is when this autonomy is diminished through interference from an external source. Reproductive control can take numerous different forms: economic (not giving a woman money to buy contraception or obtain an abortion), emotional (accusing her of cheating if she recommends contraception or the man denying paternity of the pregnancy), as well as physical (beating her up upon finding her contraception or threatening to kill her if she has an abortion).

Past research on intimate partner violence has documented how abusive men use intimidation, emotional abuse, isolation, belittlement, children, male privilege, economic abuse, and coercion and threats to exert power and control over their partners (Johnson, 1995; Pence and Paymar, 1993). While reproductive control is not specified in Pence and Paymar's Power and Control Wheel, aspects of control specified in the wheel can be acted out in the reproductive arena. Specifically, economic abuse, coercion and threats, belittlement, using male privilege and emotional abuse all can be exercised to control and abuse women around their reproductive capacity. Coker (2007) attempted to model the sexual health affects of IPV, showing in her conceptual framework that IPV can decrease women's control over their sexuality/life, increase sexual risk-taking behaviors, increase partner nonmonogamy, and decrease contraceptive use and that these behaviors can lead to increased unplanned pregnancy and increased sexually transmitted infections. This project expands Coker's figure (adding in directional arrows to increase intelligibility of her existing model) to add greater specificity to relevant categories as well as add more determinants of negative reproductive health outcomes. Under decreased contraceptive use we add forced sex and contraceptive sabotage. We also added two more outcomes to the box describing reproductive health outcomes: an increase in unwanted births and an

[1] For a full explication of their birth control sabotage questions, see pg. 18 of the report from the Center for Impact Research (2000).

increase in (unwanted) abortions, that is both abortions that are wanted by the woman as well as abortions that are brought about through coercion by her partner. Our final contribution is a box linked via bidirectional arrows to the two left-hand boxes on sexual outcomes of IPV that specifies the mechanisms by which these outcomes occur: increased pregnancy promotion and decreased reproductive autonomy carried out through unwanted impregnation and partner control over pregnancy resolution. Of course these types of sexual abuse reduce women's control over their sexuality/life, increase their stress, decrease their sexual pleasure and increase sexual dysfunction as indicated by the directions of the arrows (Figure 1). Our additions to Coker's (1997) model are bolded to draw attention to them.

[INSERT FIGURE 1 ABOUT HERE]

In loving relationships that would be deemed healthy by most objective standards, partners often let their contraceptive and childbearing preferences be known. Yet it is generally understood that through negotiation, both partners get a say in what takes place. Reproductive control occurs when women's partners simply demand or enforce their reproductive desires without demonstrating any interest in women's intentions or even in direct conflict to women's stated desires. It is the tone and intensity with which the partners express their desires and the consequences the woman is threatened with if she does not do what he wants which set these behaviors apart. Reproductive control does not include cases where men irresponsibly engage in unprotected sex, but does include cases where men deceptively attempt to impregnate their partners against their will; it does not include cases where men try to convince their partners to carry an unintended pregnancy to term, but does include cases where men issue violent threats to get the woman to resolve the pregnancy the way he wants.

This study adds to previous work on reproductive correlates of abuse by defining the different types of reproductive control perpetrated by men, laying the behaviors out along a temporal continuum. Those three temporal periods are pre-sexual intercourse, during sexual intercourse, and post-conception. Pre-sexual intercourse, women are subject to verbal pressure and threats from their partner about making them pregnant. During this same time frame, partners can prevent women's access to and use of effective contraception. During sexual intercourse, which can be forced, men can manipulate contraception to render it ineffective which includes not withdrawing when that was the agreed upon method of contraception. Post-conception, partners can attempt to influence the outcome of the pregnancy to end either in an abortion or a birth. Definitions of each type of reproductive control identified within the sample are provided in Table 1.

[INSERT TABLE 1 ABOUT HERE]

Partner influence is only one way that women might lose reproductive autonomy. Reproductive control can be exerted upon women from other sources as well: parents, especially if the woman is a minor; in-laws, especially in certain cultures such as South Asian cultures; and the medical establishment, such as when health insurance fails to cover abortion or reversible contraceptive methods, or when doctors do not present

women with the full range of reproductive choices they have including contraception and termination. The ways that this control was experienced by women from their partners was the focus of inquiry for this project. The purpose of this study, then, was to collect detailed narratives of reproductive experiences among women who have ever experienced IPV to examine their reproductive health experiences to identify and conceptualize reproductive control. Given the high proportion of unplanned pregnancies in the United States (49%) and the prevalence of intimate partner violence (one-third of women have experienced violence in their lifetimes) (Finer and Henshaw, 2006; Centers for Disease Control and Prevention, 2008), a further exploration into women's experiences of abridged reproductive autonomy was warranted.

Methods

The study, conducted in 2007, employed a purposive sampling strategy, recruiting 75 women with a history of IPV from three sites: a domestic violence shelter, a freestanding abortion clinic, and a family planning clinic providing a full range of reproductive health services including abortion. One site was located in a large metropolitan area in the Midwest and two sites were located in large metropolitan areas on the East Coast approximately 150 miles away from one another. The domestic violence shelter provided a sample of women with a known history of IPV while the clinics provided opportunities to identify women seeking reproductive health care who screened positively for IPV.

Women were eligible to participate if they were between 18-49 years of age, spoke English well enough to understand the questions and relate their experiences, and answered either of the following questions affirmatively: "Have you ever been hit, slapped, choked, kicked, physically hurt or threatened by a current or former partner?" or "Has anyone ever made you take part in any sexual activity when you did not want to?" At the domestic violence shelter, we assumed that all women 18-49 were eligible for participation and the interviews were scheduled at a time convenient for the women. At the abortion clinic, patients were screened by clinic staff while at the reproductive health clinic, patients were screened by the study interviewers. At the abortion clinic, women were interviewed before their surgical abortion or during their follow-up visit; while at the reproductive health clinic, women were interviewed after their medical consultation. Interviews were conducted by female members of the study team who had been trained to ask women about violence and sexual health issues. The interviewers were trained to administer a safety plan to help any respondent in current danger get to a safe place. As a further protection, all the facilities where the interviews were conducted either had a social worker on staff or had staff who were trained in appropriate referral techniques in the event of an adverse outcome or if the individual exhibited the need for further counseling. Both the safety plan and appropriate referrals for women in immediate danger were used during the fieldwork. Interviewers obtained written informed consent from each respondent prior to each interview. A Certificate of Confidentiality from the National Institutes of Health was obtained to further protect the respondents. The study protocol was approved by the Institutional Review Board of the Guttmacher Institute.

Using a semi-structured set of open-ended questions, participants were asked to describe their relationship histories including all contraceptive use, births, abortions and miscarriages. This technique captured whether each partner had been physically and/or sexually abusive. Interviews covered respondents' abilities to negotiate sexual encounters, contraception, and decisions around pregnancy. The interviews also covered respondents' experiences with health care providers and feelings about their sexuality. Interviews lasted on average one hour. At the conclusion of the interview, participants were provided a list of local resources for violence-related services and received $40 cash. Final sample size was determined by achieving a balanced number of respondents from the three sites to achieve a total sample that would capture a breadth of diversity and approached saturation. Four respondents were excluded from this analysis; three had incomplete interviews, and one only had a history of childhood sexual abuse without IPV (final N = 71).

Interviews were digitally recorded without any identifying information and professionally transcribed verbatim. Transcripts were edited for accuracy by members of the research team. The coding structure into which the data were organized, created in N6 (QSR International, Melbourne, Australia), reflected both original research questions in addition to themes and topics that emerged during the interviews. Additions of new codes or changes in code definitions were determined via consensus among the research team. No new codes emerged after coding approximately 30 interviews. The team compared results and checked each other's work to verify agreement in coding. Respondents' reproductive experiences were retrieved within the context of the relevant relationship—physically violent or non-physically violent. This distinction was made according to a combination of the respondent's description of the relationship and the interviewers' understanding of whether any of the abusive behaviors as defined in the screening questions were present in that relationship. The current analysis focuses on experiences of reproductive control across respondents' physically abusive and non-physically abusive relationships. Some respondents experienced different types of reproductive control with one pregnancy while others experienced aspects of reproductive control with different pregnancies.

In the majority of cases where partners attempted to influence the outcome of the pregnancy, partners' desires were contrary to the respondents'. In a small number of situations, respondents were ambivalent or even in agreement with the pregnancy outcome that her partner wanted, but her desires were irrelevant to her partner. We included those cases in this analysis as these situations underscore how men's actions were really about controlling his partner since even when her fertility desires were in line with his, he still resorted to control. All reported experiences with reproductive control qualified for inclusion in our analysis, and were not dependent on the final outcome of the controlling behavior. That is, if a man wanted a woman to get pregnant but she effectively resisted his coercion, she was still categorized as having experienced reproductive control. Women who resisted control are not a separate population of women: Some women were able to resist control in one situation but in others.

We identify quotes using numbers, the respondent's age at the time of the interview (as opposed to her age at the time of the event being described), and whether or not the relationship in which the reproductive control occurred was abusive. While some reproductive control being experienced in nonviolent relationships mirrored that taking place in violent relationships, it just so happens that the quotes selected for inclusion are all from abusive relationships. This might be because of the greater range and intensity of reproductive control women experienced within violent relationships.

Results

Sample Characteristics

Sample characteristics are presented in Table 2. Fifty-three respondents (74%) reported ever experiencing some type of reproductive control. The demographic characteristics of the respondents who reported experiencing at least one type of reproductive control did not differ from the rest of the sample. Most respondents were between 20-29 years of age, African-American, and had completed at least high school.

[INSERT TABLE 2 ABOUT HERE]

Pregnancy-promoting behavior (prior to sexual intercourse)

Verbal threats, such as a man telling his partner he is going to make her pregnant, often took place disconnected from a specific act of intercourse, sometimes prompted by images on television or other environmental stimuli. While the language men used varied, men mostly talked about wanting to tie the woman to him forever.

> He was like, "I should just get you pregnant and have a baby with you so that I know you will be in my life forever." …It's just like, for what, you want me to not go back to school, not go to college, not want me to do anything just sit in the house with a baby while you are out with friends.
> --*Respondent 1, 19 years of age at time of interview, violent relationship*

In a number of situations, the abusive partner was being sent to jail and his stated reason for wanting to make his partner pregnant was that he saw less chance of his partner leaving him if she were pregnant when he was sent away.

When women objected to being told they were going to be made pregnant, women reported being ignored or belittled or that their partners interpreted their protests as emotional rejection, which set into play complex dynamics including the woman reassuring her partner of her feelings for him which sometimes led to unprotected sex.

Intentionally trying to impregnate a woman who does not want to become pregnant (during sex)

Forced sex was a violent way for men to threaten women with pregnancy. These acts of sexual intercourse took place either with the explicit intention of impregnating the woman or with complete indifference to whether the woman was protected from pregnancy. Respondents' experiences ranged from violent rape to engaging in unprotected sexual intercourse that was unwanted by the woman.

> Respondent (R): I was supposed to go back for my Depo shot and I missed my appointment and of course, I can't tell him, "No, he can't have any [sex]," you know.
> Interviewer (I): Why can't you tell him "no"?
> R: Because "no" is not a question, "no" is not, there is no "no" when it comes to sex with him. […] So regardless of whether I wanted to get pregnant or not you know, there's, you can't say "no."
> --*Respondent 2, 25 years of age at time of interview, violent relationship*

While some men, such as the man described above, appear to be indifferent to their partner's contraceptive use and solely focused on sexual intercourse, some respondents described their partner's active interception of contraceptive use which left them exposed to the risk of unwanted pregnancy.

The most common ways contraceptive sabotage occurred was either when men failed to withdraw even though it was the agreed upon method of contraception or when men refused to use condoms. When men did consent to use condoms, many women said that their partners manipulated the condoms to render them ineffective including taking them off surreptitiously before or during sex, biting holes in them, and not telling their partners when the condom came off or broke. Another way that respondents experienced contraceptive sabotage was when their partners tried to dissuade them from using hormonal contraception by citing exaggerated side effects that scared the respondent into non-use. These behaviors often took place in combination with verbal threats of pregnancy so that there was no doubt about the man's intentions. Other sabotage manifested in direct physical interference:

> Interviewer (I): Do you feel like he ever tried to control your use of birth control?
> Respondent (R): Yeah.
> I: How so?
> R: By telling me not to use it or like when I had the pill, he used to act out and ask me why I am using them. […] Then, there was another time I started using the ring and he pulled it out of me. [He asked:] "What's this, who be advised you to be using this kind of stuff?" [...] I was like, I thought I could actually hide this one, not knowing you will come up inside of me and pull it out of me.
> – *Respondent 3, 24 years of age at time of interview, violent relationship*

When contraceptive sabotage resulted in a conception, women were vulnerable to further reproductive control to bring about the pregnancy outcome he desired.

<u>Attempts at influencing the outcome of the pregnancy (post-conception)</u>

Most women who reported that their partner attempted to control the pregnancy outcome experienced pressure or coercion to resolve the pregnancy the way he wanted; fewer women reported experiencing threats of violence and the use of force.

Among respondents who wanted to terminate the pregnancy, they described abusive partners making them feel bad about their desire to abort using tactics such as begging, badgering and making promises to support the baby to pressure the women into giving birth.

> And I told him—right when I found out I was pregnant, I told him, "You know, I hate to say this, but I want to have an abortion." […] [He said], "No, you're crazy. How can you say that, [respondent]? You can't just kill your child!" And he was just making me feel so guilty until, finally, I was just, like, "Okay, then. I'll keep the baby."
> *--Respondent 4, 19 years old at the time of the interview, violent relationship*

Other men refused to allow their partners to have abortions, and his refusal denied her access to an abortion. Sometimes this was through men withholding the money to pay for an abortion; some partners sabotaged appointments for abortions by doing things such as making the respondent eat, which prevented her from being able to have the general aesthesia she needed for the abortion; coming into the clinic and "breaking things up" so that the woman left with the man to stop him from making more of a scene; and withholding transportation including bus fare so that she could not get to the clinic for the procedure.

> He kept stopping it [the abortion], remember, he kept track [of when the appointments were], taking the car, [saying the car] wouldn't work, saying, "I can't come because of this and this but I have to be there, but I have to work this day," so he kept dragging it out, 'cause he wanted me to not be able to have it.
> *--Respondent 5, 26 years old at the time of the interview, violent relationship*

Respondents also described partners who threatened to harm or kill them if they had an abortion:

> He really wanted the baby—he wouldn't let me have—he always said, "If I find out you have an abortion," you know what I mean, "I'm gonna kill you," and so I really was forced into having my son. I didn't want to; I was 18. […] I was real scared; I didn't wanna have a baby. I just got into [college] on a full scholarship, I just found out, I wanted to go to college and didn't want to have a baby but I was really scared. I was scared of him.
> *--same respondent as above in a different abusive relationship*

Among women who wanted to have the child, some described experiencing pressure and coercion to terminate a pregnancy. Even when men hadn't used contraception to avoid an unintended pregnancy, there were situations in which men demanded abortions once their

partners became pregnant. Some men threatened to hurt the woman with the intention of bringing about the end of the pregnancy.

> Respondent (R): He sat there and was like, "If you don't get it done, I'm throwing you down the steps, or I'm doing something!"
> Interviewer (I): Did that scare you?
> R: At the same time, yeah, because I probably could believe he would do it. But, because at one time, he was like, "I'll just punch in your stomach," and I am thinking, "Oh yeah, he punched me on my face, he might punch me in my stomach." So just actually feeling, like, the pain because feeling the baby there, it was, like I can't do this, I was like, "This is crazy." I was like, "If it doesn't get done [by a doctor], he's going to do it, and I don't want that to be done. So if it's going to be done, it's going to be done right way, so."
> *--Respondent 6, 21 at the time of the interview, violent relationship*

Not all women did what their partners wanted them to do—some had abortions when their partners wanted them to have the child; some had children that their partners wanted them to abort. These acts of resistance occurred much less frequently than adherence to partner's demands and in a number of cases led to a high number of abortions: one woman whose partner wanted her to have children and refused to use contraception had had eight abortions at the time of the interview.

Discussion & Implications

The behaviors discussed in this paper are all attempts to control women through controlling the reproductive part of their lives. Just as other types of abuse are emotional as well as physical, reproductive control was also emotional (through pregnancy promotion, accusing a woman of infidelity if she suggests contraceptive use) as well as physical (through forced sex or physically interfering with a woman's use of contraception as this put her at risk of an unintended pregnancy). The behaviors presented here do not represent an escalating sequence of events (from promoting a pregnancy to attempting to influence the outcome of a pregnancy) since not everyone experienced all of the types of control presented. At the same time, these behaviors rarely occurred in isolation. Furthermore, these behaviors were repeated within and across respondents' relationships. We were surprised to find that reproductive control emerged in physically abusive as well as non-physically abusive relationships.

As descriptions of reproductive control are currently limited in the literature, we aimed to capture through these narratives the range and intensity of reproductive control experienced by our respondents. We limited this analysis to 1) behaviors carried out by the partners of the women in our sample with the explicit intent of impregnating her or when these men demonstrated complete indifference regarding whether or not the woman became pregnant when she explicitly did not want to be pregnant, and 2) once pregnant, men's attempts at determining the outcome of the pregnancy either in direct opposition to the woman's stated preference or without regard for her preference. That is, while forced

sex and condom refusal can take place for many reasons, those events were only included in our analysis when they fit the above criteria.

Comment [a1]: MK: Refer back to this conceptual framework in discussion when describing how findings are situated within larger body of evidence around IPV, gendered power dynamics, etc.

While IPV has been associated with a plethora of negative reproductive health outcomes: unwanted pregnancy; women not using their preferred method of contraceptive; sexually transmitted infections including HIV/AIDS; miscarriages; repeat abortion; a high number of sexual partners; and poor pregnancy outcomes. While there does exist a correlation between IPV and at least some aspects of reproductive control that have been documented to date, perhaps reproductive control is a much more direct proximal determinant of these negative reproductive health outcomes than IPV. Interventions crafted around reproductive control may have the potential of more directly mitigating these negative reproductive health outcomes and may be more feasible than addressing what may be the more distal determinant of IPV.

Intimate partner violence is rooted in control and denying a woman control around her reproductive capacity, especially forced pregnancy and childbearing, creates an indelible connection between the woman and the abuser no matter how the pregnancy ends. While some women do not find the experience of abortion difficult, others find it extremely difficult (Shellenberg and Frohwirth, 2009). Previous experiences with abortion impacts how some women choose to resolve future unintended pregnancies. The physical and mental health outcomes of abuse are intensified and made more complex by bringing unplanned (and often unwanted) children into the dysfunctional situation that then the woman needs to protect.

Reproductive control is a heretofore under explored mechanism that might be causing unintended pregnancy; rapid, repeat pregnancy; sexually transmitted infections; repeat abortion; and women's inability to meet their fertility goals. Targeted screening, intervention, and prevention strategies in clinical settings are needed to identify reproductive control. If disclosure of reproductive control occurs, protocols need to be in place to assure a woman's safety and autonomy. Providers should recognize that some women may need to hide their contraceptive method from their partners. Hidden methods of birth control such as Depo-Provera, the NuvaRing, IUDs, tubal ligations and emergency contraception have the potential of improving the reproductive health outcomes of women who are at risk of experiencing reproductive control (Schwarz, Gerbert and Gonzales, 2007). Providers should conduct prenatal care and abortion counseling in private, and should ask questions about whether anyone is pressuring the woman either to terminate or to continue the pregnancy. If the woman is being pressured to continue the pregnancy, a medication abortion has the potential of being passed off as a miscarriage which may help her terminate a pregnancy her partner wants her to continue. Yet these behaviors carry risks for the woman and so a decision-making model that takes into account possible violence she may experience if her covert contraceptive use or abortion are discovered need to be discussed with the woman and factored into the course of action she chooses.

Comment [m2]: I think that you need a great deal more on how these reproductive control behaviors fit into the larger body of evidence on IPV and you also need to make a stronger case for why reproductive control needs to be explored in greater detail - influence on physical and mental health outcomes

Recent legislative efforts have been introduced across the U.S. aimed at penalizing partners who coerce a woman to have an abortion. Some of these measures attempt to penalize the doctor who provides an abortion taking place under coerced circumstances. While these data demonstrate that coerced abortions are in fact happening, they also show that if women are unable to get an abortion requested or coerced by their partners, some may be at risk of experiencing physical violence from the partner. Some of this violence might be perpetrated with the intention of inducing an abortion. Denying such a woman a safe abortion can therefore endanger her health. Furthermore, these data also point to the occurrence of coerced births. The one-sided emphasis on only penalizing partners and providers involved in coerced abortions appears to be less about addressing reproductive control than denying women access to safe abortions. What is needed is education for providers on how to assess for the full range of reproductive control. Greater partnerships between providers and domestic violence advocates have the potential of improving reproductive health outcomes through decreasing unintended pregnancy and supporting safe motherhood when desired.

These findings should be interpreted in light of the following limitations. Our use of a purposive sampling strategy screening women in intimate partner violence means that these findings cannot be generalized to other women experiencing IPV or to women without IPV histories. It is worth reiterating that we were not screening potential respondents on reproductive control, a phenomenon that may be occurring to varying degrees outside of the IPV population.

Comment [m3]: Your discussion is heavy on limitations - I don't think that you need to go into so much detail and explanation in order to justify this work. It is such an exploratory area of research that it warrants qualitative inquiry. This seems to be a strength rather than a limitation. (You could put this justification into the methods section)

These data were gathered after screening women on their experiences of IPV and sexual abuse. The interview began by the interviewer asking women to say more about the experiences they were referring to when they answered affirmatively to the screeners. This could have led women to overemphasize the abusive relationships in their lives and skip over or simply skim over the non-physically abusive relationships, so that these data under-represent the experiences of reproductive control in non-physically abusive relationships. Another possible bias in the data is that a greater emphasis was given by women in their narratives to the experiences that resulted in an unintended pregnancy since experiences of reproductive control that did not result in a pregnancy may not have been as memorable for the respondent or even stood out in her mind to the same degree as experiences that did result in pregnancy. Both of these possibilities would in fact generate an undercount of violent and non-violent men's reproductive control.

As these data are qualitative, we are not able to quantify the role that reproductive control plays in influencing reproductive outcomes from contraceptive use to pregnancy resolution. Yet as there are no tested or agreed upon ways of measuring reproductive control, coming up with a quantitative measure of this behavior and its related outcomes is not straightforward. We hope that question development and testing with the appropriate populations by researchers with expertise and interest in reproductive health and IPV will get the field closer to appropriate measures of this behavior so that such measures would be able to be incorporated into surveys that would be able to estimate prevalence nationally as well as within different sub-populations. Factor analysis could demonstrate which measures are the strongest dimensions for capturing reproductive

control. As reproductive control can take many forms, though, the challenge will be measuring it uniformly so that estimates will be comparable across different populations. Similarly, because of the type of data collected, we are not able to predict even within this clinic-based sample, who is most likely to experience reproductive control.

As these data are cross-sectional, we are not able to separate out the temporal order of reproductive control, i.e. whether experiencing reproductive control comes before physical violence, occurs concomitantly within physically abusive relationships, or is possibly occurring after physical aggression. We do know that some relationships with reproductive control did not escalate to physical violence as, according to some of the respondents, those relationships had come to an end. Another consequence of the data being cross-sectional is that we only have women's responses from a single point in time. Even though they were being asked to recall events in the past, some of the events of interest had happened recently. Had they been asked these same questions on a different day when they were not in a domestic violence shelter or receiving reproductive health care services, women's answers may have been different.

Reproductive control is subjectively experienced. While we did not rely on women's own labeling of the experience as such, the way women chose to relate their experiences influenced our interpretation of her partner's behavior. For example, if the woman felt like a partner's concerns about contraceptive side effects were legitimate and raised out of genuine concern for his partner's health and well-being, the respondent would likely have chosen to represent the situation differently than if she believed her partner was engaging in alarmist scare tactics in an effort to put her off of contraception. Therefore, women's ideas about the role their partner should play in their contraceptive use and their interpretation of their partner's actions heavily influence whether she related her experiences in a way that led us to conclude that the experience was one of reproductive control. The same experience happening to a different woman may not have been interpreted the same way by both. While these weaknesses can be acknowledged, nothing more can be done to address it.

Lastly, our understanding of what took place in the reproductive area is inherently dependent upon the woman's rendition of the experience. There are reasons why it might be socially advantageous for the woman to represent the situation beyond her control for reasons of self-representation as well as self-preservation: The woman may distort what took place to help her maintain a version of accounts that she finds easier to accept because of what she thinks it says about her and about her relationship. Alternatively, a woman may not reveal instances of reproductive control if doing so reduces her feelings of autonomy. Again, one can see that the biases can go in either direction.

The fact that men are attempting to control women's reproduction is not new. The fact that couples disagree on desired fertility goals is also not new—there are high rates of couple disagreement about their desired number of children worldwide (Voas, 2003). What makes reproductive control something that deserves public health attention is the threats and coercion men enacted on these women to try to get them pregnant and resolve pregnancies in the manner the men wanted, often leaving the women unable to act

autonomously. In a country where women are largely socialized to expect to be in control of their reproductive capacity, a loss of that capacity is perhaps more acutely felt than it would be in a country where women may not hold the same expectations of reproductive autonomy either because of gender inequality (such as traditional societies in sub-Saharan Africa) or because of state intervention including possible state-enforced punishment for disobeying state norms (such as in China).

More research is needed into effective ways to foster resiliency among women at risk of partner manipulation in the reproductive arena. Prevalence estimates of reproductive control in the population at large would inform the magnitude of this event. Further studies are also needed in the other ways that women experience an abridgement of their reproductive autonomy. Further work is needed to examine other, possible long-term effects of experiencing reproductive control on sexual health. Beyond reproductive control, research is also needed on the other mechanisms through which women with histories of IPV experience reproductive health disadvantages. If such surveys were designed well enough, they would also allow public health researchers to predict the proportion of negative reproductive health outcomes that could be explained by reproductive control—not only among women who have experienced IPV although the incidence would likely be significantly higher in that population. Such specificity would help point to other aspects of reproductive health experiences that deserve greater attention among women who have experienced IPV to mitigate negative reproductive health outcomes.

In conclusion, this study underscores the wide range of behaviors in which male partners engage in efforts to control pregnancy and pregnancy outcomes of their female partners. The experiences of reproductive control identified here help explain the mechanisms through which IPV is correlated with poor reproductive health outcomes including unintended pregnancies that either contribute to the abortion rate or result in mistimed or unwanted births. Public health prevention and intervention efforts to identify reproductive control are needed wherever women receive sexual and reproductive health care so that women can be educated about the impact of such controlling behaviors on their health. Elucidating the breadth and prevalence of reproductive control in previously unrecognized ways may assist in improved service delivery in reproductive health settings as well as engaging reproductive health care providers in screening women on intimate partner violence.

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Comment [a4]: Check to make sure this covers abortion.

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Figure 1: Expanding Coker's (2007) Model to Include Greater Specificity Regarding How IPV Affects Sexual Health

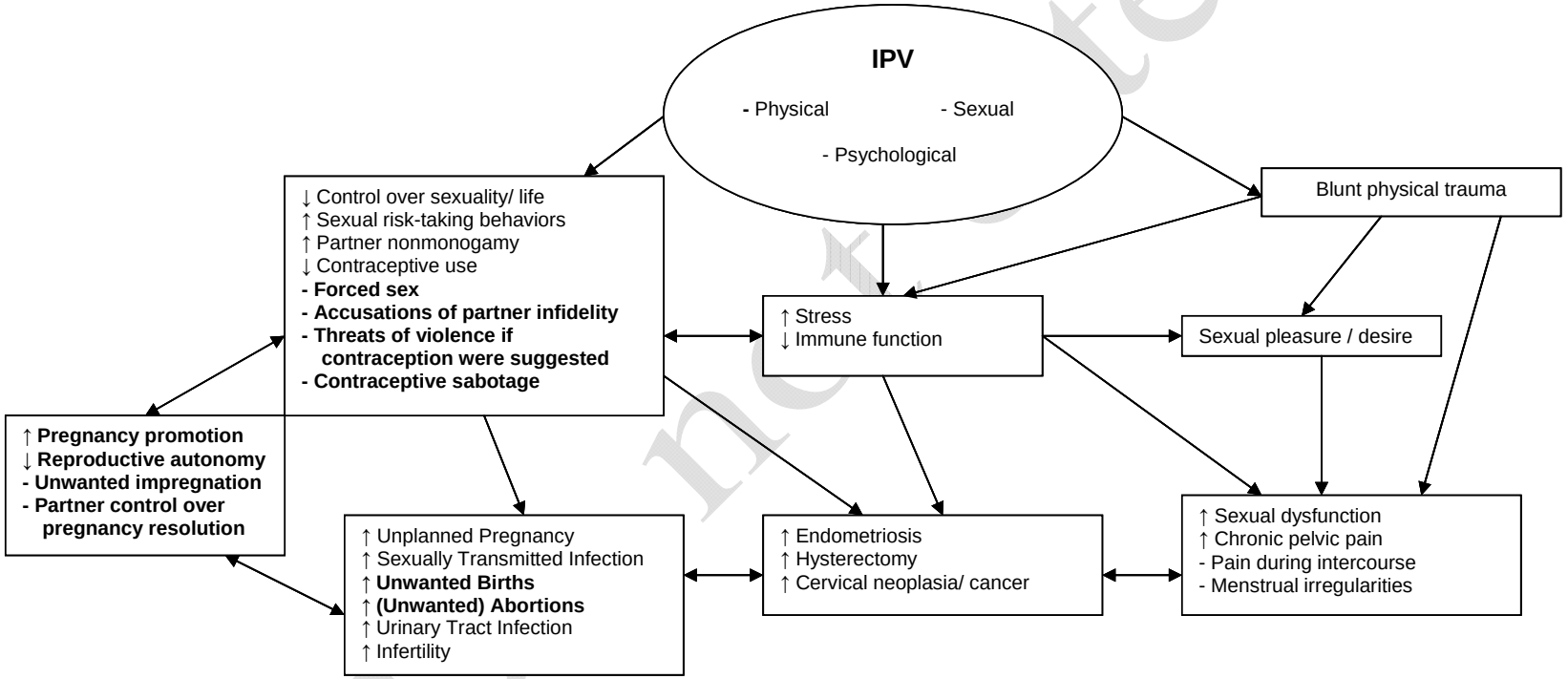

Table 1: Reproductive Control Classifications Laid Out Along a Temporal Continuum

Category	Behavior
Pre-sexual intercourse	
Pregnancy promotion	pressuring and coercing a woman to become pregnant; stating intentions to impregnate a woman; closely monitoring a woman for signs of pregnancy; pressuring a woman to become pregnant again immediately after a pregnancy loss; accusing her of being unfaithful if she uses birth control; accusing her of being unfaithful if she wants to abstain from sex as a tactic to get to her to have sex
Contraceptive sabotage	flushing birth control pills down the toilet; finding hidden birth control pills or emergency contraception in order to destroy them; refusing to withdraw (although that was the agreed-upon method of contraception); refusing to help pay for birth control; forcing sterilization; convincing a woman that birth control has dangerous side effects
During sexual intercourse	
Sexual violence	rape; forcing unprotected sex; forcing a woman to continue having sex after the condom breaks; having unprotected sex with a woman while she is asleep
Condom manipulation	surreptitiously removing the condom during sex; compromising the condom (e.g. covertly biting holes in the condom before putting it on); not putting the condom on but saying he did; refusing to use condoms; accusing a woman of being unfaithful if she asks the man to use a condom; forcing a woman to continue having sex after condom breaks
Contraceptive sabotage	removing the NuvaRing from inside a woman's vagina; refusing to withdraw (although that was the agreed-upon method of contraception); removing the condom during sex; forcing a woman to continue having sex after a condom breaks
Post-conception	
Controlling pregnancy outcome	refusing to help pay for an abortion; refusing to allow a woman to have an abortion; strongly encouraging or pressuring a woman to have a birth; threatening to end a woman's pregnancy violently if she did not have an abortion; perpetuating violence against her in order to cause a miscarriage or kill the fetus
Interfering with healthcare	interrupting, obstructing or sabotaging abortion appointments (sometimes resulting in the woman having an abortion at a later gestation than she desired); sabotaging abortion plans by forcing a woman to be ineligible for an abortion; preventing access to prenatal care

Table 2. Demographic Characteristics of Entire Sample (n=71) and those who experienced any reproductive control (RC) (N=53)*

	All	%	RC	%
Age				
18-19	7	10%	7	13%
20-24	16	23%	12	23%
25-29	22	31%	18	35%
30-39	15	21%	10	19%
40-49	10	14%	5	10%
Total	**70**	**100%**	**52**	**100%**
Race				
White/Caucasian	23	33%	14	26%
Black/ African-American	37	53%	32	60%
Asian Pacific		0%		0%
American Indian/ Alaska Native	1	1%		0%
Hispanic/ Latina	8	11%	6	11%
Other	1	1%	1	2%
Total	**70**	**100%**	**53**	**100%**
Education				
0-8th grade	0	0%	0	0%
9-11th grade	9	14%	8	17%
High school graduate/ GED	20	30%	18	38%
Some College/ Associate's Degree	24	36%	16	33%
College graduate or higher	13	20%	6	13%
Total	**66**	**100%**	**48**	**100%**
Abortion experience				
Yes	48	68%	40	75%
No	23	32%	13	25%
Total	**71**	**100%**	**53**	**100%**
Parity				
0	27	38%	17	32%
1	11	15%	9	17%
2	12	17%	10	19%
3+	21	30%	17	32%
Total	**71**	**100%**	**53**	**100%**
STIs				
yes	43	61%	34	68%
no	27	39%	16	32%
Total	**70**	**100%**	**50**	**100%**
# of sexual partners				
2-5	16	23%	13	26%
6-10	18	26%	10	20%
11-20	13	19%	10	20%

20-50	11	16%	9	18%
50+	10	14%	8	16%
Total	**68**	**98%[+]**	**50**	**100%**

* N does not total the sample size since some respondents refused to answer.

[+] Does not equal 100% due to rounding.

Table 3: Synopsis of respondents' experiences with pregnancy controlling behaviors (Quoted)

Respondent ID	Age at interview	Description
1	19	Partner refused condoms and tried to convince her not to use birth control, accusing her of being unfaithful if she tried. He denied paternity when she became pregnant. She had two abortions with him which he refused to pay for.
2	25	The respondent was with this abusive man for 8 years. He would make her have sex and not use condoms. Her last two pregnancies with him were unwanted.
3	24	After the incident of the partner removing her NuvaRing, she was able to get back on birth control pills which she hid underneath the bed so her partner would not find them. She got pregnant with him again and she thought they had agreed on an abortion, but he became irate when she had an abortion.
4	19	This respondent did not want to become pregnant with her violent, much older partner at that time because she was only 16, however, he refused to use condoms. She attempted to use birth control pills, but he would refuse to pay for them and she would run out, and he would accuse her of taking them because she was cheating on him. Right before she delivered, he began insisting that the child wasn't his, and kicked her out of the house.
5	26	Quote 1: This partner impregnated her against her will by forcing her to have sex and refusing to withdraw. She ended up aborting at 4 months gestation. She had four other abortions with this partner. Quote 2: This boyfriend was physically abusive and impregnated her. She didn't want to have the baby, but he threatened to kill her if she had an abortion, so she had the child. Her partner attended the delivery against her will, and she ran away from him a few days after the birth.
6	21	She did not want to have this child either but a combination of fear of the procedure and lack of money delayed her from making an appointment. She finally got an abortion in the 5th month.