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

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Abstract

Women who have experienced intimate partner violence are consistently found to have poor sexual and reproductive health when compared to non-abused women, but the mechanisms through which such associations occur are inadequately defined (Coker, 2007). Through face-to-face, semi-structured in-depth interviews, we gathered full reproductive histories of 71 women aged 18-49 with a history of IPV recruited from a family planning clinic, an abortion clinic and a domestic violence shelter in the United States. A phenomenon which emerged among fifty-three respondents (74%) was male reproductive control which encompasses pregnancy-promoting behaviors as well as control and abuse during pregnancy in an attempt to influence the pregnancy outcome. Pregnancy promotion involves male partner attempts to impregnate a woman including verbal threats about getting her pregnant, unprotected forced sex, and contraceptive sabotage. Once pregnant, male partners resort to behaviors that threaten a woman if she does not do what he desires with the pregnancy. Reproductive control was present in violent as well as non-violent relationships. By assessing for male reproductive control among women seeking reproductive health services, including antenatal care, health care providers may be able to provide education, care, and counseling to help women protect their reproductive health and physical safety.

Background

Intimate partner violence (IPV) is associated with 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 (Williams, Larsen, & McCloskey, 2008; Alio, Nana, & Salihu, 2009; Center for Impact Research, 2000; Fisher, Singh, Shuper, Carey, Otchet, MacLean-Brine, et al., 2005; Coker, 2007; Maman, Campbell, Sweat, & Gielen, 2000; Taggart & Mattson, 1996). The proximal determinants of unwanted pregnancy—forced sex and partner's unwillingness to use contraception—have been documented in relationships that include IPV (Lathrop, 1998; Campbell, Woods, Chouaf, & Parker, 2000). Other behaviors that further undermine women's ability to prevent an unwanted pregnancy in abusive relationships 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 expose women to the risk of pregnancy, this body of work has not focused on whether men's intentions were to make the woman pregnant.

Pregnancy itself is a vulnerable time for women in abusive relationships. Previous work has documented the increased risk of violence during pregnancy (Gelles, 1988), with unintended pregnancies carrying an even greater risk of violence than intended pregnancies (Gazamararian, Adams, Saltzman, Johnson, Bruce, Marks, et al., 1995). This violence may be the result of the partner's jealousy and resentment towards the unborn

child (Campbell, Oliver, & Bullock, 1993; Mezey, 1997), and/or the partner's increased feelings of insecurity and possessiveness during the pregnancy (Bacchus, Mezey, & Bewley, 2006). Women report that financial worries and their reduced physical and emotional availability during pregnancy may lead their partners to physical violence (Bacchus et al., 2006). Another reason for violence that has not been systematically explored in the pregnancy and IPV literature is whether the partner may be using violence to make a woman resolve a pregnancy the way that he desires.

While many reproductive health correlates of IPV are known, and male control over various aspects of women's reproductive autonomy have been identified within as well as outside of physically violent relationships, the extent of male involvement in explicitly promoting pregnancies and controlling the outcomes of such pregnancies has not been conceptualized as a type of abuse. We posit that it is ideal for women to have reproductive autonomy which we use to mean a woman's ability to make independent decisions about her reproduction. We define interference with this autonomy *reproductive control*. Reproductive control can be exerted upon women from sources other than their partners including parents, peers, and the medical establishment. Reproductive control by a partner is the present focus of inquiry.

Reproductive control occurs when women's partners demand or enforce their own reproductive intentions whether in direct conflict with or without interest in the woman's intentions, through the use of intimidation, threats, and/or actual violence. It can take numerous forms: economic (not giving the woman money to buy contraception or obtain an abortion), emotional (accusing her of infidelity if she recommends contraception or 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). This masculine exercise of power crosses the three main domains of gendered relations as described by Connell (1987): labor, as coerced childbearing reifies women's domestic responsibilities; power, through exerting authority over women's sexual experiences and biologic vulnerability; and cathexis, through men's appropriation of women's sexual, emotional and intimate experiences and mandating child-rearing.

An analysis of violence against women conducted in ten countries by the World Health Organization (WHO) earlier this decade defined IPV as physical (having been slapped, pushed, hit, kicked, choked, burned, or threatened with a weapon; singling out violence during pregnancy as having been beaten, punched or kicked in the abdomen while pregnant), sexual (having experienced forced sex, coerced sex out of fear of her partner, or having been forced to do something sexually humiliating), emotional (having been insulted, belittled, scared, intimidated, or threatened), and controlling (isolating, monitoring, ignoring, demonstrating jealousy, acting suspicious, or demanding that the woman need permission to do basic day to day activities) (García-Moreno, Jansen, Ellsberg, Heise, & Watts, 2005). This same study defined poor reproductive health outcomes of IPV to include unsafe sexual behavior, pregnancy complications, unwanted pregnancy and unsafe abortion (Ellsberg, Jansen, Heise, Watts, García-Moreno, & the WHO Multi-Country Study on Women's Health and Domestic Violence Against Women Study Team, 2008). In a summary piece, Coker (2007) reviewed 51 articles published

between 1966 and 2006 which examine the association between IPV and sexual health. Based on this body of work, she modeled the direct as well as indirect causal mechanisms through which IPV affects sexual health indicators documented to date in the literature. Identified mechanisms include decreased control over one's sexuality as well as decreased contraceptive use which can lead to increased unplanned pregnancy and increased sexually transmitted infections.

The WHO study and Coker's review treat reproductive correlates of IPV as indirect consequences of abuse rather than as measurable dimensions of abusive behavior. Specifically, their models do not account for pregnancy promotion, birth control sabotage, and coerced abortion. Pregnancy promotion has been defined as messages and behaviors that lead females to believe their partner was actively trying to impregnate them (Miller, Decker, Reed, Raj, Hathaway, & Silverman, 2007). 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 the woman to fear violence if she does use contraception or even brings up the topic) (Blanc, Wolff, Gage, Ezeh, Neema, & Ssekamatte-Ssebuliba, 1996; Njovana & Watts, 1996; Wingood & DiClemente, 1997; Watts & Mayhew, 2004; Clark, Silverman, Khalaf, Ra'ad, Al Sha'ar, Al Ata, et al., 2008). Abusive men coercing their partners to have abortions has also been documented (Coggins & Bullock, 2003; Hathaway, Willis, Zimmer, & Silverman, 2005), as has males forcing their partners to become sterilized (Hathaway et al., 2005). As coercive control of women is a central motivation of abuse (Campbell & Humphreys, 1993), we argue that reproductive control is another component of power and control in abusive relationships.

This study adds to previous work on reproductive correlates of IPV by defining the different types of reproductive control perpetrated by men, examining the behaviors along a temporal continuum. Those three temporal periods are before sexual intercourse, during sexual intercourse, and post-conception. Pre-sexual intercourse, women may be subject to verbal pressure and threats from their partner that he intends to make them pregnant. In this same time frame, partners may 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 or removing condoms. Post-conception, partners can attempt to influence the outcome of the pregnancy for it to end either in an abortion or a birth. More examples of each type of reproductive control as experienced by our sample are provided in Table 1.

Methods

The study, conducted in 2007, collected the reproductive experiences of women who have ever experienced IPV. We 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. All sites were located in large metropolitan areas, one in the Midwest and two 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 and 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 conduct 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 if the individual demonstrated 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 1 h. 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 which approached saturation. Four respondents were excluded from this analysis; three had incomplete interviews, and one had a history of only childhood sexual abuse and no 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 various types of reproductive control surrounding one pregnancy (or unsuccessful attempts at making her pregnant) while other respondents experienced various types of reproductive control across different pregnancies (including multiple and varied attempts at making her pregnant).

In the majority of cases where partners attempted to influence the outcome of the pregnancy, partners' desires were in conflict with the respondents'. In a small number of situations included in this analysis, respondents were ambivalent or even in agreement with the pregnancy outcome that her partner wanted, but her desires were irrelevant to her partner and these men still resorted to controlling their partners. 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 not in others.

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 and 29 years of age, African-American, and had completed at least high school.

Pregnancy promoting behavior (prior to sexual intercourse)

Women who had experienced reproductive control often began their narrative explaining the ways that their partners verbally threatened and coerced them to become pregnant. Verbal threats, such as a man telling his partner he was going to make her pregnant, often

took place disconnected from the act of intercourse, sometimes prompted by images on television or other environmental stimuli. Women said that their partners often spoke about wanting to impregnate her to tie her 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. This partner refused condoms and tried to convince the respondent 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, both of which he refused to pay for.*

In a number of situations, the abusive partner was being sent to prison and his stated reason for wanting to make his partner pregnant was if she were pregnant, he saw less chance of her leaving him while he was imprisoned because she would be seen as less desirable by other men and invested in maintaining a relationship with the father of the child.

Women related these incidents underscoring their partners' blatant disregard for their own pregnancy intentions. When women objected to being told they were going to be impregnated, women reported being ignored, belittled or abused.

> We are not ready for kids. You know I already had, at the time I had two children and I told him, like, "We are not ready for kids. Our relationship is not even stable enough." And he would be like, "That's not true. It's never the right time to have a kid. You just don't want to be a part of me. You just don't want me to be around forever." And I will have to, like, coerce him into believing that I wanted to be with him and that wasn't the reason why, to avoid him back lashing with all that extra, "I am not shit," and, "I am a whore," and all that kind of stuff.
> *--Respondent 2, 28 years of age at time of interview. This partner repeatedly flushed her birth control pills down the toilet and refused to use condoms. When she did become pregnant, she had a miscarriage but her partner accused her of having a covert abortion. Years later he raped her and she became pregnant and did have an abortion.*

Since, in some situations, men interpreted women's protests to being made pregnant as emotional rejection, this set into play complex dynamics which often led to the woman reassuring her partner of her feelings for him to avoid abuse and this sometimes included having unprotected sex.

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

Threatening women with pregnancy during sex ran a gamut of behaviors ranging from surreptitiously deceptive to violent. Forced sex, as a form of physical violence, has been

well documented (Coker, 2007), but forced sex which took place either with the explicit intention of impregnating the woman or with complete indifference to whether the woman was protected from pregnancy, has not been documented. Respondents' experiences of unwanted sex ranged from violent rape to engaging in unwanted sexual intercourse, sometimes only unwanted because it was unprotected.

> Respondent (R): I was supposed to go back for my Depo shot [Depo-Provera, an injection to be obtained every three months that hormonally prevents pregnancy] 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 3, 25 years of age at time of interview. 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.*

While some men, such as the man described above, acted indifferent to their partner's contraceptive use and pregnancy desires, 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 understood by the woman to be the agreed upon method of contraception or when men refused to use condoms. When men did consent to use condoms, many respondents 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. This dissuasion often took place in combination with verbal threats of pregnancy or direct physical interference so that there was no doubt about the man's intentions.

> 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 [the NuvaRing, a hormone-releasing ring placed in the vagina to prevent pregnancy that must be changed monthly] 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 4, 24 years of age at time of interview. This partner scared her out of taking birth control pills telling her,* ""There is always some kind of harmful side effect…it messes up your inside sometimes, it messes up so bad that you can't even have kids or stuff like that." And I was like, "Okay, well I want to be able to have kids one day." So I stopped it, I got scared of it."" *After this incident with the Nuvaring, she got on the Patch [an adhesive patch that one places on one's body and it releases hormones to prevent pregnancy; it must be replaced monthly], which she was able to hide for a while until he found it and told her that someone had died from using the Patch and that it was causing her hair to fall out. She carried one pregnancy to term with this partner and aborted another.*

When a pregnancy occurred, women were vulnerable to further reproductive control to bring about the pregnancy outcome he desired.

Attempts at influencing the outcome of the pregnancy (post-conception)

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 5, 19 years old at the time of the interview. This respondent did not want to become pregnant with her violent, much older partner. At that time 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 the pregnancy described above, he began insisting that the child wasn't his, and kicked her out of the house.*

Other men refused to allow their partners to have abortions, denying 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] […]. 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 [for the abortion], 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 6, 26 years old at the time of the interview. 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.*

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. Her partner attended the delivery against her will, and she ran away from him a few days after the birth.*

Among women who wanted to have the child, some described experiencing pressure and coercion to terminate a pregnancy. Even when men had not 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 [the] right way, so."
> *--Respondent 7, 21 at the time of the interview. 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 of the pregnancy.*

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, refused condom use, and refused to let her use contraception, had had eight abortions at the time of the interview, all had been pregnancies with this same partner.

Discussion & Implications

These narratives capture the range and intensity of partners' attempts to control women's reproductive 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). The behaviors presented here do not represent an escalating sequence of events (from promoting a pregnancy, to forced impregnation, to attempting to influence the outcome of a pregnancy) as not everyone in the sample experienced all of the types of control presented. Yet events of reproductive control rarely occurred in isolation of other events of reproductive control. Furthermore, women related experiencing reproductive control within and across their relationships including in non-physically abusive relationships.

In Coker's (2007) review of the literature, she calls for tests of and revisions to the conceptual model that she proposes which summarizes the relationship of IPV and sexual health documented to date in the literature since at the time she wrote her article, she pointed out that we did not know the mechanisms by which IPV affects sexual health indicators. Based on our findings, this study extends Coker's conceptual model on sexual and reproductive health outcomes of IPV by adding reproductive control as a proximal mechanism linking sexual as well as reproductive outcomes with IPV. The variables that we added to the left-hand side of Coker's conceptual framework—increased pregnancy promotion and decreased reproductive autonomy carried out through unwanted impregnation and partner control over pregnancy resolution—lead to loss of control over one's sexuality, decreased contraceptive use, increased unwanted pregnancy and its concomitant outcomes of increased (unwanted) births and (unwanted) abortions and all the subsequent correlates already included in Coker's model including stress, reproductive health problems, decreased sexual pleasure and physical pain. The addition of the "Reproductive Control" box shows that IPV does not have to precede reproductive control and that reproductive control may occur without IPV but is accompanied by the same sequelae (decreased contraceptive use, increased unplanned pregnancy) as when it is accompanied by IPV.

Throughout Coker's model, we added titles to the boxes to help clarify the categories being captured. We also added greater specificity to relevant Coker categories: Under decreased contraceptive use, we add forced (unprotected) sex and contraceptive sabotage. "Unprotected" in parentheses indicates that in some instances, while the sex itself is not unwanted, the fact that it is without contraception makes it unwanted. We added the additional outcomes of an increase in (unwanted) births and an increase in (unwanted) abortions (that is both births and abortions that are wanted by the woman as well as births

and abortions that are brought about through coercion by her partner) to the box describing reproductive health outcomes. We changed a number of the arrows to be uni-directional—the modified arrows are circled in the figure. We moved infertility from the box on the reproductive outcomes of IPV and reproductive control to the box on reproductive organ problems. Finally, we added directional arrows on some of the measures of Coker's existing model, e.g. loss of control over one's sexuality increases women's reproductive organ pathologies and increases sexual dysfunction including pain (Fig. 1). Our additions to Coker's (2007) model are bolded to draw attention to them.

This conceptual model will continue to evolve as our lines of inquiry for studying reproductive control become more sophisticated. Further studies will also provide validation of the phenomenon by documenting its occurrence among different populations and with larger samples.

Reproductive control is a heretofore under-explored process that can lead to negative reproductive health outcomes (unintended pregnancy; rapid, repeat pregnancy; sexually transmitted infections; repeat abortion; and women's inability to meet their fertility goals) among women who have experienced IPV. Interventions crafted around mitigating reproductive control could take the form of targeted assessment and prevention strategies in clinical settings. Assessment would allow providers to identify which women may need to hide their contraceptive method from their partners as hidden methods of birth control have the potential of improving the reproductive health outcomes of women who are experiencing reproductive control (Bimla 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 medical abortion has the potential of being passed off as a miscarriage which may help her safely terminate a pregnancy her partner wants her to continue. Yet these decisions carry risks for the woman and so a decision-making model that takes into account possible violence she may experience as a result need to be discussed with the woman and factored into the appropriate course of action.

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 include evidence of coerced abortions, they also demonstrate that if women are unable to get an abortion demanded 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 highlight the occurrence of coerced births. The one-sided emphasis on only penalizing partners and health care providers involved in coerced abortions does not adequately address the danger a woman is in who is experiencing reproductive control.

These findings should be interpreted in light of the following limitations. The data were gathered after screening women on their experiences of IPV and sexual abuse. This could have led women to overemphasize their abusive relationships so that these data under-represent women's experiences in non-physically abusive relationships. Another possible bias is that women may have been more likely to talk about reproductive control experiences that resulted in an unintended pregnancy. Both of these possibilities would generate an underestimation of the extent of reproductive control. These findings cannot be generalized to other women experiencing IPV or to women without IPV histories. Since the majority of the sample was African-American, we do not know if comparable results would have emerged among a different sample.

As these data are cross-sectional, we are not able to elucidate the temporal order of reproductive control, i.e. whether experiencing reproductive control comes before experiences of physical violence, occurs concomitantly within physically abusive relationships, or is possibly occurring after physical aggression or perhaps all of the above. We do know that some relationships with reproductive control did not include physical violence as, according to the respondents, those relationships had come to an end. We only have women's responses from a single point in time, and even those some of these events had happened recently, the narration of those events were likely influenced by recall bias. 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 may have answered differently.

Lastly, our understanding of what took place in the reproductive arena is inherently dependent upon the woman's rendition of the experience. A woman may maintain a version of accounts that she finds easier to accept because of what she thinks it says about her, children she may have, and/or her relationship. For example, she may not reveal instances of reproductive control if doing so reduces her feelings of autonomy. Alternatively, she may choose to represent what took place as beyond her control for reasons of self-representation. The biases could work 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.

Due to evolving gender scripts and shifting hierarchies, the enactment of masculinity is no longer as straightforward as it perhaps was in the past. Nor are many of its forms accessible to socially disenfranchised men due to social isolation as a result of race, social status or income, just to name some of the potentially isolating social attributes (Barker, 2005). To the extent that men perceive their roles in society to be in crisis, they may resort to reproductive control through disregard for women's pregnancy preferences, forced pregnancies and mandatory childbearing as a means to keep women in subordinate

positions and exert patriarchal power (Connell, 1987). Further examination of men's motivations and actions in the reproductive sphere is needed to allow us to achieve a better theoretical understanding of reproductive control.

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 and breadth of this phenomenon. Further studies are also needed on the multiple ways that women experience constraints on their reproductive autonomy. Examination of longer-term effects of experiencing reproductive control on sexual health is also needed. Beyond reproductive control, research on the other mechanisms through which women with histories of IPV experience reproductive health disadvantages remains critical.

In conclusion, this study identifies a wide range of behaviors in which male partners engage in their 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 assessing for both IPV and reproductive control among their female patients.

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

Category		Behavior
Before 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%**

* Ns in the table do not total 53 as some respondents refused to answer some of the demographic characteristic questions

+ Does not equal 100% due to rounding.

Figure 1: Expanding Coker's (2007) Model on IPV and Health to Include Mechanisms Through Which Male Reproductive Control and IPV May Affect Women's Reproductive and Sexual Health