Sexual and Reproductive Health and Reproductive Coercion in Women Victim/Survivors Receiving Housing Support

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Abstract

Housing instability and intimate partner violence (IPV) compromise women's sexual and reproductive health (SRH) through reduced contraceptive access and increased risk of unintended pregnancy. This study describes the reproductive health status and needs of IPV survivors receiving housing support and explores factors influencing their experience of reproductive coercion (RC), specifically. Cross-sectional baseline data from a quasi-experimental study of 70 IPV survivors enrolled in housing programs in the Baltimore, MD, metropolitan area from June 2019 through December 2020 were analyzed. Of the 70 women enrolled in the study, 70.3 percent ($n=45$) desired to avoid pregnancy, but 57.4 percent were either using no contraceptive method (31.2%) or methods with low effectiveness (26.2%). Approximately, 1 in 6 women (16.4%, $n=11$) experienced RC in the past 3 months, which was associated with frequency and severity of IPV ($p=0.001$ to 0.005) and PTSD ($p=0.001$), as well as not sharing children with the abusive partner ($p=0.002$). This study highlights reproductive health risks in an important and under-studied population of women seeking housing due to IPV. Leaving an abusive relationship is a uniquely vulnerable time, and also a time of opportunity, as women are accessing services that can be tailored to their SRH needs. Significant results highlight vulnerability to and consequences of RC in this population. This study has implications for IPV support programs and housing programs that serve women.

Keywords Intimate partner violence · Reproductive coercion · Housing instability · Sexual & reproductive health · Contraception

Housing instability is characteristic of severe intimate partner violence (IPV) among women. IPV victim/survivors have almost four times greater odds of housing instability compared to women who have not experienced IPV, making housing instability a major concern among this vulnerable population (Pavao et al., 2007). Homeless and unstably housed women experience unique barriers to their sexual and reproductive health (SRH) including sexually transmitted infection, adverse birth outcomes and prematurity (Begun et al., 2019; Dasari et al., 2016; Ensign, 2000;

Himmelstein & Desmond, 2021; Meurice et al., 2019). Little research has been done on SRH outcomes specific to homeless or unstably housed women who are also experiencing IPV, though evidence shows that risk for unintended pregnancy is elevated among homeless women due to lack of condom access, high rates of sexual victimization, transactional sex (i.e., exchange of sex for resources), as well as abusive relationships (Cronley et al., 2018; Ensign, 2000). It is clear that support for health needs is a critical component of the transition to safety and stability for women victim/survivors. Housing instability in IPV victim/survivors is associated with hospital and emergency department utilization, mental health disorders including addiction, PTSD and depression, and chronic health conditions such as diabetes, hypertension and chronic pain (Daoud et al., 2016; Rollins et al., 2012; Vijayaraghavan et al., 2012). Housing stability is a critical factor in achieving improved health outcomes for these women (Daoud et al., 2016).

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Reproductive coercion (RC) is a type of IPV in which partners or family members coerce or influence the reproductive decisions of women, whether by pressuring them to get pregnant, sabotaging or restricting access to birth control methods, or controlling the outcome of a pregnancy (Grace & Anderson, 2018; Miller et al., 2010). RC is correlated with more severe IPV (Bagwell-Gray et al., 2021; Grace et al., 2020b; PettyJohn et al., 2021; Swan et al., 2020; Tarzia & Hegarty, 2021), and is one mechanism by which IPV affects unintended pregnancy and contraceptive non-use (Alhusen et al., 2019; Grace et al., 2020a; Miller et al., 2010; Pallitto et al., 2013). RC has not been studied among women receiving housing support.

Sexual and reproductive health encompasses physical, emotional and social wellbeing regarding the reproductive system (United Nations Population Fund, 2020). Areas of SRH can include pregnancy intention, family planning, IPV and RC. Pregnancy intention describes the level of planning and desire prior to pregnancy, and includes the categories of unintended, unwanted, mistimed, ambivalent, and planned, all of which may be fluid over time (Aiken et al., 2016; Barrett et al., 2004; Santelli et al., 2009; Shreffler et al., 2015). Unintended and unwanted pregnancy are associated with adverse health outcomes such as pregnancy loss, maternal depression, low birthweight and neonatal mortality (Abajobir et al., 2016; Hall et al., 2017). For women in violent relationships, an unintended pregnancy may have the effect of increasing dependence on an abusive partner, decreasing economic stability, and prolonging vulnerability to violence.

The use, availability and effectiveness of contraceptive methods affects the degree to which women are able to plan pregnancy, and can be impacted by knowledge, availability, side effects, medical eligibility, influence of friends, family and partners, and levels of self-efficacy and autonomy, among other factors (Callegari et al., 2017; Campo et al., 2012; Cha et al., 2015; Daley, 2014; Dehlendorf et al., 2010; Downey et al., 2017; Polis & Zabin, 2012; Yee & Simon, 2014). IPV can also be a barrier to SRH; victim/survivors have low rates of consistent contraceptive use potentially due to difficulty negotiating use with a violent partner, and higher use of the low effectiveness withdrawal method, possibly due to partner preference for a method they can control (Cha et al., 2015; Kusunoki et al., 2017). A study of college women found IPV and sexual violence to be significantly associated with contraceptive non-use, abortion, emergency contraceptive use, and STI screening and diagnosis (Lévesque et al., 2016). The association between IPV and SRH is understudied among women receiving housing support.

The purpose of this study was to describe the reproductive health status and needs of a sample of victim/survivors receiving housing support, and to explore factors influencing their experience of RC.

Methods

Design

We analyze baseline survey data from the parent study, a quasi-experimental, prospective longitudinal, mixed-methods evaluation of safety, stability, and health outcomes for IPV victim/survivors following housing support services. Participants were recruited from June 2019–December 2020 through an IPV service provider in Baltimore, MD, that also provided housing support programs (transitional housing and rapid rehousing). Eligible participants were 1) 18 years of age or older, 2) self-identified as female, 3) receiving housing support services from the IPV service provider, 4) experienced physical or sexual intimate partner violence (IPV) or fear of partner violence in the previous year, and 5) able to complete study activities in English. Sample size was determined by power analysis for the parent study.

Participants and Data Collection

Participants were referred to study staff by the IPV service partner, if they expressed interest in the study. Following oral informed consent, data collection was administered by trained study staff in a private area of the housing program office, at participants' homes while accompanied by housing program staff in a small number of cases, or remotely during the COVID-19 pandemic. Survey data collection was computer-assisted to maximize participant comfort and confidentiality via REDCap (Research Electronic Data Capture), a secure, web-based application. Participants who completed the survey received a \$15 gift card to thank them for their time, and information on violence and health resources.

Measures

Demographics Demographic variables included age, race/ethnicity ("Which one of these groups would you say best represents your race?" and included categories of White, Black, African American or Afro-Caribbean, Hispanic or Latino, American Indian or Alaska Native, Asian, Pacific Islander, Multiracial/More than one race, and Other), education ("What is the highest grade or year of school you completed?", categories condensed due to small cell sizes), family size (adults and children living with the participant currently), relationship to partner (Married, Separated, Divorced, No relationship, Committed relationship, Casual dating relationship, Hooking up, or Other, categories condensed due to small cell sizes), income (total annual household income for the year prior to the start of the study,

categories condensed due to small cell sizes) and employment status (worked at a job for pay in the past month).

Housing Instability *Housing instability* was measured with 10 items from the Housing Instability Index (Rollins et al., 2012) (7 dichotomous questions, 2 that were recoded to be dichotomized, 1 item dropped for poor performance), adapted to measure housing instability in the previous 3 months instead of 6 (to maintain consistency with the timing and sequencing of data collection for the study, which was prospective). Questions measured risk factors for housing instability such as “Have you had trouble with a landlord in the past 3 months?”. Number of “yes” responses were summed for a total score of 0–9, with higher scores indicating greater instability. Cronbach’s alpha was 0.70 in the current sample.

IPV Recent *physical and sexual IPV* was measured with 2 scales. Physical and sexual abuse was measured with five items from the physical and sexual subscales of the widely used and validated Revised Conflict Tactics Scale (CTS) (Straus & Douglas, 2005), which asked about frequency of behaviors such as “pushed, shoved or slapped me” and “insisted on sex when I did not want to”, from 0 (never) to 3 (5 or more times), in the past 3 months. Responses were summed for a total score of 0–15, with higher scores indicating greater frequency of IPV. Cronbach’s alpha was 0.87 in the current sample. Psychological impact of IPV was measured with the 10-item Women’s Experience of Battering (WEB) Scale (Smith et al., 1995) which asks for level of agreement from 1 (agree strongly) to 6 (disagree strongly), with statements such as “He/she makes me feel unsafe in my own home” over the past 3 months, and resulting in a sum with higher scores indicating greater psychological vulnerability (more battered). Cronbach’s alpha was 0.95 in the current sample.

Reproductive Coercion Past 3-month *reproductive coercion* was measured with the 5-item abbreviated Reproductive Coercion Scale (McCauley et al., 2017), which asks yes/no questions about experience of behaviors such as being told not to use birth control and being prevented from accessing birth control. Reproductive coercion was defined as a positive response to any item. Cronbach’s alpha was 0.76 in the current sample.

Health and Well-Being *Depression* was measured with the 2-item Patient Health Questionnaire-2 (PHQ-2) which asks for frequency of depressive symptoms ranging from 0 (not at all) to 3 (nearly every day). A total score of 3 or more was scored as depression, based on previous studies showing this cutoff has a sensitivity of 83% and specificity of 92% for major depression, when compared to a mental health

professional interview (Kroenke et al., 2003). *Post-traumatic stress disorder (PTSD)* was measured with the 6-item abbreviated PTSD screening instrument (Lang & Stein, 2005) which asks how often in the past month (adapted to 3 months for this survey) respondents were bothered by problems such as feeling irritable or having angry outbursts, and having difficulty concentrating. Responses ranged from 1 (not at all) to 5 (extremely). Responses were summed; a total score of 14 or higher was scored as PTSD, based on validation studies showing a sensitivity of 0.80 and specificity of 0.76 when compared to the longer form Composite International Diagnostic Interview (CIDI) (Lang & Stein, 2005). Cronbach’s alpha was 0.89 in the current sample. *Inability to afford medical care* was measured with one item asking “Was there a time in the past 12 months when you needed to see a doctor but could not because you could not afford it?”.

Reproductive Health *Current contraceptive use* was measured with one item, “What contraceptive methods, if any, are you currently using?”, allowing for reporting of multiple methods, then grouped into a categorical variable by highest level of effectiveness of methods used, by CDC criteria (Centers for Disease Control and Prevention (CDC), 2020): low (condoms, withdrawal, emergency contraception), moderate (oral, injectable, patch, ring), and high (implant, intrauterine device, sterilization). *Prospective pregnancy intentions* were measured with one validated item asking “Which of the following best describes your current situation regarding pregnancy?” (Kavanaugh & Schwarz, 2009), with responses of “trying to get pregnant” coded as “planning pregnancy”, “trying to avoid pregnancy” coded as “planning not to get pregnant”, and “wouldn’t mind getting pregnant”, “wouldn’t mind avoiding pregnancy” or “don’t know” coded as “ambivalent”. Participants were asked about any current and past-year *pregnancies*. For positive responses, a *retrospective pregnancy planning* measure adapted from the PRAMS survey (Centers for Disease Control and Prevention (CDC), 2021) asked whether the participant had wanted to be pregnant later (coded as mistimed pregnancy), sooner or at the time (planned), or not then or in the future (unwanted). Additional response options included “I wasn’t sure what I wanted” and “I didn’t really care either way”, which were both coded as “ambivalent” for this new categorical variable.

Data Analysis

Descriptive statistics were used to describe the study sample and summarize SRH indicators. Fisher’s exact and independent sample t-tests were used to analyze differences between participants who had and had not experienced RC on covariates. Sample size floated to accommodate small amounts of

missing data. Analyses were conducted in Stata Statistical Software (StataCorp, 2019).

Ethics/Institutional Review Board

All procedures were approved by the Institutional Review Board of the Johns Hopkins Bloomberg School of Public Health (IRB00009497) and were aligned with ethical best practices for violence-related research (World Health Organization, 2016). Research assistants underwent a four-part training program in research ethics, unique considerations and needs specific to IPV victim/survivors, and field protocol.

Results

A total of 70 participants enrolled in the parent study and completed the baseline survey (Table 1). The mean age of participants was 33.11 (94.3% of participants were under age 45; not shown), and the majority of the sample identified as Black, African American, African or Afro-Caribbean (77.1%) and were divorced, separated, or in no current relationship with their abusive partner (88.2%). Approximately, 21% of participants forwent medical care in the past year because they could not afford it.

Sexual and Reproductive Health: pregnancy intentions and contraceptive use

Of the 12 participants who were currently pregnant or gave birth in the past year, half were ambivalent about the pregnancy at the time it occurred, and the remainder were planned ($n=3$), mistimed ($n=2$) or unwanted ($n=1$) (Table 1). At the time of the survey, a majority of participants were trying to avoid pregnancy (70.3%) and 28.1 percent were ambivalent about getting pregnant. Over half of participants were using either no contraceptive method or methods with low effectiveness (57.4%), 11.5 percent were using moderately effective methods, and 31.1 percent were using highly effective methods. There was no difference in effectiveness of methods used based on pregnancy planning status; equivalent numbers of participants who were avoiding pregnancy used no method/low effectiveness methods and moderate/highly effective methods (48.8% vs 51.2%, $p=0.316$; Fig. 1).

Reproductive Coercion

Nearly one in six participants in the sample (16.4%, $n=11$) experienced any RC in the past 3 months. Participants who experienced RC had a significantly smaller family size (2.82 vs 4.76, $t=3.29$, $p=0.002$) and participants who did not

Table 1 Demographic characteristics and sexual/reproductive health status of women victim/survivors receiving housing support ($N=70$)

Characteristic	N (%)
Age (mean, SD)	33.11 (7.25)
Race	
Asian	1 (1.4)
White	2 (2.9)
Other	3 (4.3)
Hispanic/Latina	4 (5.7)
Multiracial	6 (8.6)
Black	54 (77.1)
Education	
Some college or less	64 (91.4)
College graduate or more	6 (8.6)
Family size (adults and children) (mean, SD)	4.52 (2.00)
Current relationship with abusive partner	
Married/ Committed relationship	8 (11.8)
None, Separated, Divorced, Casual, Other	60 (88.2)
Total household income in 2018 before taxes	
\$0 to \$20,000	39 (63.9)
\$20,001 or more	22 (36.1)
Worked at a job for pay (past month)	
No	27 (39.1)
Yes	42 (60.9)
Needed to see a doctor but could not afford (past year)	
No	53 (79.1)
Yes	14 (20.9)
Sexual & Reproductive Health Status	
Currently pregnant or gave birth in the past year	
No	56 (82.4)
Yes	12 (17.6)
Retrospective pregnancy intention (current pregnancy or gave birth in the past year)	
Mistimed	2 (16.7)
Planned	3 (25.0)
Unwanted	1 (8.3)
Ambivalent	6 (50.0)
Prospective pregnancy intention	
Ambivalent	18 (28.1)
Planning pregnancy	1 (1.6)
Planning not to get pregnant	45 (70.3)
Current contraceptive use (by method effectiveness) ¹	
No method	19 (31.2)
Low effectiveness = > 15% failure rate	16 (26.2)
Moderately effective methods = 1–15% failure rate	7 (11.5)
Highly effective methods = < 1% failure rate	19 (31.1)
Reproductive coercion (past 3 months)	
No	56 (83.6)
Yes	11 (16.4)

¹low effectiveness (condoms, withdrawal, emergency contraception), moderately effective (oral, injectable, patch, ring), highly effective (implant, intrauterine device, sterilization)

Fig. 1 Effectiveness of contraception used by participants who were avoiding pregnancy ($n=45$)

have children with their abusive partner were significantly more likely to experience RC than those who did (41.2% vs 6.1%, $p=0.002$) (Table 2). Furthermore, IPV frequency and severity were significantly greater in women who experienced RC on both measures of IPV (CTS: 6.27 vs 2.67, $t=-2.89$, $p=0.005$ and WEB: 51.18 vs 33.27, $t=-3.50$, $p=0.001$). RC was also significantly associated with higher PTSD scores (25.09 vs 18.46, $t=-3.47$, $p=0.001$). No significant association was found between experiencing RC and age, race, education, pregnancy status, pregnancy intention, relationship status, household income, ability to meet financial needs, housing instability or depression.

Discussion

Results highlight SRH underpinnings of IPV and the importance of offering a full range of health services for IPV victim/survivors receiving housing supports. Women actively fleeing or desiring to flee an abusive relationship are often the most vulnerable IPV victim/survivors. Recent RC was experienced by 16.4% of women in this study and was associated with severe partner abuse, PTSD, smaller family size, and not sharing a child with their abusive partner. Furthermore, a lack of economic resources limited some women from receiving medical care when they needed it, possibly influencing contraceptive uptake.

Despite a stated desire to avoid future pregnancy, the majority of participants reported use of no contraceptive method or methods with low effectiveness, potentially

indicating unmet need for contraception. This may be rooted in financial instability for some, as 1 in 5 participants reported being unable to afford medical care and all were experiencing some level of housing instability. The majority of participants in this study were of childbearing age, and thus potentially vulnerable to unintended pregnancy and RC. Other studies have found that IPV victim/survivors who experience an unwanted pregnancy are more likely to use highly effective and woman-controlled methods of contraception after an abortion (Drew et al., 2020). It may be that as the women in this study establish greater economic and housing stability, they also start choosing more effective and woman-controlled methods of contraception; a larger sample and longer follow-up is needed for this analysis. Another explanation may be that the women in this sample were not in relationships or were in the process of leaving their abusive partners, so they may not have prioritized SRH at the time of this study. However, women may benefit from improved access to contraception moving forward as they potentially reengage with former partners or begin new relationships, if they view unintended pregnancy as a potential threat to their economic stability and safety. It may also be that the concept of contraceptive effectiveness is itself flawed. Effectiveness rates are based on pregnancies despite perfect and usual use, but even a method with a high failure rate can be used effectively by a motivated user. It may be more appropriate to measure satisfaction with method, ability to use methods correctly and regularly, and access to desired methods.

Prevalence of past-3 months RC was consistent with or higher than community samples that were similar in timeframe and/or demographics (Capasso et al., 2019; Hill et al., 2019; McCauley et al., 2017; Paterno et al., 2018; Thaller & Messing, 2014), but lower than other samples of IPV victim/survivors which used longer measurement timeframes (Decker et al., 2017; Grace et al., 2020b; Hess & Del Rosario, 2018). RC was significantly associated with frequency and severity of IPV as well as PTSD, possibly as a result of the severe violence; these results are consistent with other studies of similar populations which included non-IPV victim/survivors (Alexander et al., 2019), as well as other studies of exclusively IPV victim/survivors (Grace et al., 2020b). In this sample, RC was not associated with depression, though other studies do find an association (Alexander et al., 2019; Capasso et al., 2019; Fasula et al., 2018). Our sample consisted solely of IPV victim/survivors and nearly half (46.4%) screened positive for depression; this high prevalence in such a small sample may have precluded ability to discern the independent impact of RC on depression, and the small sample may have limited statistical power to detect small differences. Other non-significant findings (household income, ability to meet financial needs, housing instability) may be a result of the homogeneity of the sample. Leaving an

Table 2 Characteristics associated with past 3 months reproductive coercion among women victim/survivors receiving housing support ($n=67$)

Characteristic	Experienced reproductive coercion			Full sample (<i>n</i> = 67) N (column %)
	No (<i>n</i> = 56) n (row %)	Yes (<i>n</i> = 11) n (row %)	<i>p</i> value ¹	
Demographics and SRH				
Age (mean, <i>SD</i>)	32.59 (6.91)	33.91 (8.73)	0.581	33.11 (7.25)
Race			0.909	
Asian	1 (100.0)	0		1 (1.4)
White	1 (100.0)	0		2 (2.9)
Other	2	0		3 (4.3)
Hispanic/Latina	3 (75.0)	1 (25.0)		4 (5.7)
Multiracial	5 (88.9)	1 (11.1)		6 (8.6)
Black	44 (83.0)	9 (17.0)		54 (77.1)
Education			0.582	
HS graduate or less, or some college	51 (82.3)	11 (17.7)		64 (91.4)
College graduate or more	5 (100.0)	0		6 (8.6)
Family size (adults and children)	4.76 (1.91)	2.82 (0.87)	0.002	4.52 (2.0)
Currently pregnant or gave birth in the past year			0.187	
No	44 (81.5)	10 (18.5)		56 (82.4)
Yes	12 (100.0)	0		12 (17.6)
Current pregnancy intention			0.142	
Ambivalent	14 (82.4)	3 (17.7)		18 (28.1)
Planning pregnancy	0	1 (100.0)		1 (1.6)
Planning not to get pregnant	39 (88.6)	5 (11.4)		45 (70.3)
Relationship and Violence				
Current relationship with abusive partner			1.000	
Married/Committed	7 (87.5)	1 (12.5)		8 (11.8)
Separated, divorced, casual, hooking up, no relationship or other	48 (84.2)	9 (15.8)		60 (88.2)
Any children with abusive partner			0.002	
No	10 (58.8)	7 (41.2)		17 (24.6)
Yes	46 (93.9)	3 (6.1)		52 (75.4)
CTS Score (past 3 months)	2.67 (3.51)	6.27 (4.94)	0.005	3.35 (3.99)
WEB Score (past 3 months)	33.27 (16.58)	51.18 (7.29)	0.001	36.63 (16.69)
Economics & Housing Stability				
Total household income in 2018			1.000	
\$0 to \$20,000	31 (81.6)	7 (18.4)		39 (63.9)
\$20,001 or more	17 (85.0)	3 (15.0)		22 (36.1)
Current financial situation			0.739	
Can meet needs on my own or with current assistance	27 (87.1)	4 (12.9)		32 (47.1)
Can meet part of or cannot meet needs	29 (82.9)	6 (17.1)		36 (52.9)
Housing Instability Score	3.09 (2.18)	3.71 (1.33)	0.392	3.23 (2.05)
Mental Health				
PTSD score (mean, <i>SD</i>)	18.46 (6.16)	25.09 (3.11)	0.001	19.72 (6.27)
Positive depression screen			0.199	
No	33 (89.2)	4 (10.8)		37 (53.6)
Yes	23 (76.7)	7 (23.3)		32 (46.4)

¹Based on t-test or Fisher's exact test

abusive relationship is a time of significant economic and housing instability for all victim/survivors, and the women in this sample were participating in a comprehensive

support program. It is possible that including a broader sample of victim/survivors who did not have access to supportive services may reveal additional significant findings.

Women who did not have children with their abusive partners (or had fewer children overall) were more likely to experience RC. That these partners were more likely to use RC behaviors as a method of power and control may be a result of seeking to solidify an unstable relationship (Grace et al., 2020b), though women who already had children with their abusive partners may have simply been less vulnerable to RC because this means of gaining control over a partner had already been established. Additionally, it is possible that other participants did experience RC, but outside of the study measurement timeframe, when those children were conceived. Other studies did not find parity to be a significant risk factor for RC (Alexander et al., 2019; Paterno et al., 2017; Rosenfeld et al., 2017), but did not look at RC behaviors specifically perpetrated by the father of the participant's children. Risk of intimate partner homicide is elevated among women who have children that were not fathered by their abusive partner, related to sexual proprietariness and jealousy (Spencer & Stith, 2020). This study illustrates a related phenomenon which may have similar etiology and highlights that women in abusive relationships who do not have children with their abusers may be at significantly higher risk of experiencing RC.

This study has implications for clinical and IPV practice and policy. Ensuring access to the full range of health services for women receiving housing supports for IPV is a critical component of ensuring ongoing safety and stability, and may be achieved through co-location of health services at the IPV services site, as well as IPV capacity building among healthcare providers. Healthcare providers who work with women experiencing IPV who do not have children with their abusers should be alert to their elevated risk for RC and consider offering safety and harm reduction strategies such as less detectable methods of contraception. Additionally, not all IPV victim/survivors will access housing supports through dedicated IPV programs (Kaur et al., 2021), so general housing programs that serve women may need to increasingly provide access to SRH healthcare through partnerships and referrals, staff training on SRH, IPV and RC, and institutional policies on screening for RC and SRH needs, in order to meet the complex needs of this group. The women in this study had significant housing and safety needs which were likely their highest priority. But there is no doubt that support for health needs is a critical component of achieving and sustaining overall safety and stability and supporting long-term success.

Strengths and Limitations

This study is unique in its population and focus and highlights the critical impact of housing instability and violence on reproductive health outcomes and experiences of RC.

The small sample size limits statistical power to detect differences, thus null results should be considered with caution. Our sample size also limits reliability of conclusions and stability of estimates, and adjusted models were not possible. The single geographic location limits generalizability. Longer longitudinal follow-up and larger sample size are needed to adequately assess the impact of housing supports and increasing housing stability on pregnancy planning and relationships between RC and health outcomes. The homogeneous sample precluded examination of the impact of race and racism on RC, future research with larger samples may be able to elucidate this factor. Future research may also compare women who are unstably housed due to IPV with those who are unstably housed for other reasons, to isolate the impact of housing instability on the experience of RC and other SRH outcomes. Qualitative research to contextualize the RC experience in this population will be valuable for future learning. Contraceptive use is a complex construct to measure, and we may not have sufficiently captured regular or effective use of methods reported. The single-item measure of prospective pregnancy intention may have been insufficiently sensitive to detect ambivalence (Kavanaugh & Schwarz, 2009). Finally, some participants enrolled in the study several months after leaving an abusive relationship; it may be that the short measurement timeframe for RC (past 3 months) captured an artificially low prevalence.

Conclusion

This study describes the reproductive health status and needs of a population that is seldom studied, and especially vulnerable to threats to reproductive autonomy. Significant results highlight the discrepancy between stated desire to avoid pregnancy and use of effective contraception, perhaps indicating unmet need and financial barriers. RC prevalence was consistent with other studies and was a marker for more severe IPV and significant negative health outcomes. Participants who did not share children with their abusive partners were at heightened risk of experiencing RC. Housing support services may be a point of access to SRH services for women experiencing violence, and strengthening the integration of the housing support system and the public health system can mitigate vulnerability to continued violence. Unstably housed IPV victim/survivors remain a critical group for attention by researchers, healthcare providers and policy makers.

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