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Nonuse of Contraception at Conception Due to Partner Objection and Pregnancy-Related Health Care Utilization, Postpartum Health, and Infant Birth Outcomes

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Abstract

Objective: Reproductive coercion has been associated with adverse reproductive health experiences. This study examined the relationship between nonuse of contraception due to partner objection, one aspect of reproductive coercion, and selected pregnancy-related outcomes.

Methods: We used 2016–2020 data from the Pregnancy Risk Assessment Monitoring System in 22 jurisdictions to assess the prevalence of nonuse of contraception due to a partner objection by select characteristics among individuals with a recent live birth who reported an unintended pregnancy. We calculated adjusted prevalence ratios (aPRs) to understand associations with health care utilization, postpartum behaviors and experiences, postpartum contraceptive use, and infant birth outcomes.

Results: Among people with a recent live birth in the study jurisdictions ($n = 29,071$), approximately 5% reported nonuse of contraception due to a partner objection and unintended pregnancy. This experience was associated with lower prevalence of attending a health care visit before pregnancy (aPR 0.8, 95% confidence interval [CI] 0.7–0.9), first trimester prenatal care, and attending a postpartum checkup (aPR 0.7, 95% CI 0.6–0.9 for both). Higher prevalence was observed for postpartum depressive symptoms (aPR 1.3, 95% CI 1.1–1.6) and partner objecting to using birth control postpartum (aPR 2.8, 95% CI 2.1–3.9).

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Authors' Contributions

All authors contributed to the study conception and design. Writing: original draft preparation was done by D.V.D. Analysis: formal data analysis was performed by J.B. Writing: review and editing was done by all authors. All authors read and approved the final article.

Disclaimer

The findings and conclusions in this article are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

Author Disclosure Statement

The authors have no financial conflicts of interest to disclose.

Conclusions: Nonuse of contraception due to a partner objection at conception was associated with poor mental health and lower health care utilization around the time of pregnancy. Prevention efforts may include strategies that ensure provider screening for intimate partner violence, and evidence-based approaches that teach about healthy relationships, enhance self-efficacy, and address underlying drivers of violence.

Keywords

reproductive coercion; intimate partner violence; pregnancy; contraceptive use; PRAMS

Introduction

Intimate partner violence (IPV) is a widespread public health problem that is associated with health consequences across the lifespan, including physical injury, poor mental health, chronic health problems, and substance use.¹ Psychological aggression, including control of reproductive or sexual health, is one type of IPV that may include reproductive coercion or efforts, successful or unsuccessful, to get someone pregnant when they do not want to be.² Reproductive coercion can also include contraceptive sabotage when a partner limits access to or use of contraceptives, or deliberately damages or secretly takes the condom off, as well as emotional manipulation and tactics such as pressure, threats, or lies that can interfere with autonomous decisions about reproduction.^{3,4}

Studies have found estimates of reproductive coercion ranging from 8% to 16%^{5,6} and have identified racial and ethnic disparities in the experience of reproductive coercion, with non-Hispanic Black women experiencing the highest prevalence^{5,7–9} and Latina and multiracial women disproportionately affected, as well.⁷ Experiencing reproductive coercion has been associated with physical and sexual IPV,^{6,10–12} sexually transmitted infections,^{6,13,14} unintended pregnancy,^{6,15–17} and rape-related pregnancy.¹⁸ A systematic review of 27 studies provides a description of reproductive coercion, pregnancy coercion, abortion coercion, and birth control sabotage, as well as characteristics associated with these experiences and the intersection with IPV.⁷ A separate scoping review found coercive condom use resistance to be associated with interpersonal violence, emotional stress, diagnosis of sexually transmitted infections, and to be more common among people with a perceived lower ability to say “no.”¹⁹ However, information on the association between reproductive coercion or condom use resistance and pregnancy and infant health outcomes is limited.

The Pregnancy Risk Assessment Monitoring System (PRAMS) is an important source of population-based information on pregnancy-related experiences and outcomes that can be used to study the impact of violence. One study using PRAMS Phase 7 data (2012–2015) from six states that asked a question about contraceptive sabotage (i.e., ever having a partner try to keep the respondent from using birth control when they did not want to be pregnant) found a prevalence of 1.1% and that the experience was associated with physical IPV.¹² A more recent study using the same PRAMS Phase 7 data examined the relationship between experiencing contraceptive sabotage and contraceptive use at the time of conception finding an association with a higher prevalence of contraceptive use.²⁰ However, neither

study examined pregnancy-related health or infant health outcomes, and the question on contraceptive sabotage was only used by one PRAMS site in the more recent Phase 8 version of the PRAMS survey (2016–2022). Given the limitations described above, we used a nontraditional approach to assess one aspect of reproductive coercion. We analyzed the question on reasons for not using contraception at the time of conception used by 22 PRAMS sites on the Phase 8 survey. We hypothesized that people who said they did not want a pregnancy, yet reported that the only reason they were not doing something to avoid a pregnancy was because their partner objected, may have been experiencing coercive control by their partner. The PRAMS sample only includes people who became pregnant and had a live birth, so this provides a unique opportunity to look at pregnancy and birth outcomes for people whose pregnancy resulted from potentially coercive contraceptive behavior by their partner.

We examined this experience by respondent demographic characteristics, health care provider screening, and partner relationship factors. Recognizing the structural factors and history of oppression that lead to a disproportionate risk of violence for some marginalized racial and ethnic groups, we also examined differences in the nonuse of contraception due to a partner objection by race and ethnicity. We looked at the association with substance use, depression, health care utilization, postpartum contraceptive practices, and infant birth outcomes.

Material and Methods

Study population

We analyzed PRAMS 2016–2020 data from 22 jurisdictions that asked a standard (optional) question on reasons for nonuse of contraception at the time of conception on their PRAMS survey during the study years (Alabama, Arkansas, Connecticut, Florida, Georgia, Hawaii, Illinois, Iowa, Louisiana, Kentucky, Massachusetts, Maine, Michigan, Missouri, North Carolina, Nebraska, New Jersey, New York State, New York City, Oregon, Tennessee, and Washington). Jurisdictions were included for each year in which they met the target response rate threshold (2016–2017 $\geq 55\%$; 2018–2020 $\geq 50\%$).²¹ There were 29,071 individuals with a recent live birth and complete information on the reasons for nonuse of contraception in our sample in the 22 jurisdictions during the study period.

PRAMS is a jurisdiction-specific, population-based surveillance system conducted by the Centers for Disease Control and Prevention (CDC) in collaboration with state, city, and territorial health departments. Using a standardized data collection protocol, each participating jurisdiction draws a stratified random sample from birth certificate records every month. Individuals are sampled 2–6 months after a live birth and are mailed up to three surveys. Nonrespondents are contacted to complete the survey by telephone. Data are weighted to account for the PRAMS complex survey design prior to release for analysis. Details of the PRAMS methodology have been described previously.²² The PRAMS study protocol was approved by the institutional review boards of the CDC and each participating jurisdiction.

Measures

We examine one aspect of reproductive coercion in this study, which is nonuse of contraception at the time of conception due to partner objection among respondents who reported an unintended pregnancy. It is measured based on respondent reports that they were not doing anything to avoid the pregnancy at the time of conception because their partner did not want to use anything. Since partner objection to contraception alone doesn't indicate coercion, we further limited our measure to respondents who also reported an unintended pregnancy. Those who reported that they wanted to be pregnant then or sooner were considered to have an "intended pregnancy," and those who reported that they wanted the pregnancy later, never, were grouped together as having an "unintended pregnancy." We also included with the "unintended" group those who reported that they were "unsure" what they wanted. This inclusion was based on results from a previous study using PRAMS data that found the prevalence of physical IPV and health indicators for the "unsure" group to be similar to those with "unwanted" and "mistimed" pregnancies.²³

A separate series of questions was used to assess nonuse of contraception at the time of conception due to partner objection (see Fig. 1). Respondents were asked if they were trying to get pregnant when they got pregnant with their new baby. If they answered "no," they were directed to a question about whether or not they were doing anything to avoid a pregnancy. If they also answered "no" to this question, they were asked a question about their reasons for not doing anything (Phase 8 standard question E7). Respondents could check multiple responses, including "my husband or partner didn't want to use anything." Individuals who selected only this option (and reported an unintended pregnancy) were classified as having experienced nonuse of contraception at the time of conception due to partner objection, one aspect of reproductive coercion. We restricted the measure to those with only this single response because other reason response options were not suggestive of coercion (side effects, problems getting birth control, etc.).²⁴

The question about reasons for not doing anything to avoid a pregnancy included an open-ended response option "other, please tell us." To make sure we did not miss any respondents with coercive experiences, we reviewed free-text responses to this response option. Similarly, we analyzed these free-text responses among respondents who reported an unintended pregnancy ($n = 3,521$). Responses were divided among four independent coders who classified each response as "experienced coercion" or not. Coders met to discuss results and came to a consensus on all classifications. For example, write-in responses that were categorized as coercion included "he wanted a baby, but I didn't," "he was uncooperative about using condoms," and "extremely controlling husband." Those with free-text responses coded as coercion were included with the group experiencing nonuse of contraception at the time of conception due to partner objection, with or without also answering "yes" to the partner "didn't want to use anything" response option ($n = 77$) (Fig. 1).

The following information came from the linked birth certificate data: respondent age, race/ethnicity, marital status including acknowledgment of paternity for unmarried individuals (e.g., presence of documentation adding father's name to the birth record), education, and health insurance coverage for delivery. Other indicators from the PRAMS questionnaire included: self-reported disability status (report of one or more functional restrictions from a

list of six conditions) available in 10 of the 22 jurisdictions,²⁵ health care providers asking if someone was hurting the respondent emotionally or physically, and relationship factors such as physical IPV before and during pregnancy.

Statistical analysis

To describe our sample, we calculated weighted prevalence estimates and 95% confidence intervals (CIs) for nonuse of contraception due to partner objection overall and by respondent characteristics and infant outcomes. We used chi-square tests to compare select characteristics and experiences of respondents with nonuse of contraception at the time of conception due to partner objection to respondents without this experience (p -value <0.05). For variables that had more than two levels (e.g., age and education level), we also reviewed 95% CIs of the weighted prevalence to identify those that were nonoverlapping as a way to assess differences among the various levels. This typically conservative approach might fail to note differences between estimates more often than formal statistical testing. Overlap between CIs does not necessarily mean that there is no statistical difference between estimates. We used the same procedures to examine these characteristics by race and ethnicity among individuals who experienced nonuse of contraception due to partner objection to extend what has been documented in the literature about disparities among groups.

To examine associations with outcomes of interest, we calculated adjusted prevalence ratios (aPRs) to examine the relationship between nonuse of contraception due to partner objection and respondent behaviors and conditions before, during, and after pregnancy including substance use (smoking, alcohol use, and use of marijuana or illicit substances), depression, attendance at health care visits (prepregnancy visit, first trimester prenatal care, and attendance at a postpartum care visit), postpartum contraceptive practices (any use, use of long-acting reversible contraception [intrauterine device or contraceptive implant], use of postpartum female sterilization, and report of husband or partner not wanting to use a method), and infant birth outcomes (low birth weight: $<2,500$ g; preterm birth: gestational age <37 weeks; small for gestational age: weight below 10th percentile for age). All analyses were conducted using SUDAAN (version 11.0; RTI International).

Results

There were 29,701 respondents in our final sample. About 1 in 20 individuals with a recent live birth, or 4.8%, reported nonuse of contraception at the time of conception due to partner objection and unintended pregnancy ($n = 1,356$). We found higher prevalence (p -value <0.0001 and nonoverlapping CIs) among those who were 20–24 years of age compared with those 25 years and older; those who were non-Hispanic Black compared with those who were non-Hispanic White, non-Hispanic Asian/Pacific Islander, and Hispanic; unmarried respondents compared with married respondents; those who had a high school education (HS) or less compared with those with more than an HS education; and those who were Medicaid recipients at the time of delivery compared with those who had private insurance. The prevalence of nonuse of contraception due to partner objection was also higher among those who reported experiencing physical IPV before or during pregnancy (Table 1).

We looked at these same characteristics by race and ethnicity specifically among individuals who experienced nonuse of contraception due to partner objection and unintended pregnancy ($n = 1,343$). Approximately 4% were non-Hispanic White (4.0%, 95% CI 3.5–4.6), non-Hispanic Asian/Pacific Islanders (4.0%, 95% CI 3.0–5.4), and Hispanic (3.7%, 95% CI 2.9–4.7); 6.5% were non-Hispanic Black (95% CI 5.7–7.4); 7.5% were non-Hispanic multiracial (95% CI 5.2–10.9); and 7.6% were non-Hispanic American Indian/Alaska Native (95% CI 3.4–16.2) (data not shown). Among all respondents who experienced nonuse of contraception due to partner objection, a higher proportion of non-Hispanic Asian/Pacific Islander respondents were married (80.1%, 95% CI 66.9–88.9) compared with respondents from all other racial and ethnic groups and had more than an HS compared with non-Hispanic White, non-Hispanic Black, and Hispanic respondents. Compared with non-Hispanic White and non-Hispanic Asian/Pacific Islander respondents, a lower proportion of non-Hispanic Black respondents were married (19.2%, 95% CI 14.5–24.9) and a higher proportion were Medicaid recipients (80.8%, 95% CI 75.5–85.2) (Table 2).

Experience of nonuse of contraception due to partner objection and unintended pregnancy was associated with lower prevalence of attending a health care visit in the 12 months before pregnancy (aPR 0.8, 95% CI 0.7–0.9), entering prenatal care in the first trimester, and attending a postpartum checkup (aPR 0.7, 95% CI 0.6–0.9, for both) compared with the prevalence for individuals who did not experience nonuse of contraception due to partner objection and unintended pregnancy. A higher prevalence was observed for postpartum depressive symptoms (aPR 1.3, 95% CI 1.1–1.6) and reports of their partner not wanting to use a birth control method postpartum (aPR 2.8, 95% CI 2.1–3.9) compared with the prevalence among those who did not experience nonuse of contraception due to partner objection and unintended pregnancy. There was no association found with substance use (cigarette, alcohol, marijuana), depression before or during pregnancy, any use of postpartum contraception, long-acting reversible contraception, or postpartum female sterilization. In addition, there were no associations found with infant birth outcomes (birthweight, preterm birth, small for gestational age) (Table 3).

Discussion

In our study, about 5% of individuals with a recent live birth and unintended pregnancy reported nonuse of contraception due to partner objection as the only reason for not doing anything to avoid a pregnancy at the time of conception when they did not want to get pregnant. While this is not a complete or traditional measure of reproductive coercion, it includes aspects of contraceptive sabotage and coercive control where respondents experienced a partner limiting the use of contraception against their wishes. Using this measure, our estimate is slightly lower than estimates for reproductive coercion from nationally representative data for all adult women (that use additional items to capture reproductive coercion), as well as other estimates from other studies that range from 8%–16%.^{5,6} The estimates are higher than those from the PRAMS studies using the indicator specific to contraceptive sabotage (around 1–2%), potentially due to capturing a broader range of coercive experiences.^{12,20} Nevertheless, characteristics of individuals who reported nonuse of contraception due to partner objection and an unintended pregnancy were similar to those identified with reproductive coercion or contraceptive sabotage in other studies,

including younger age, lower education, and lower socioeconomic status.^{5,12,26} Like other studies on reproductive coercion, we also found a higher prevalence of IPV among people who reported nonuse of contraception due to partner objection.^{6,10}

Overall, there was a higher prevalence of nonuse of contraception due to a partner objection reported by non-Hispanic Black respondents. This finding is consistent with other studies on reproductive coercion.^{5,8,27} Social and structural factors, including racial discrimination, may result in lower access to resources and may shape how women and men experience social and sexual networks; this may explain in part the disproportionate rates of reproductive coercion reported by women from some marginalized racial and ethnic groups.^{8,28}

In our examination of respondent characteristics and experiences by race and ethnicity among the subgroup of people who reported nonuse of contraception due to partner objection, we found differences in marital status and health insurance status. A higher proportion of non-Hispanic Asian/Pacific Islander respondents were married compared with all other groups, and a higher proportion of non-Hispanic Black respondents were unmarried without an acknowledgment of paternity compared with non-Hispanic White and non-Hispanic Asian/Pacific Islander respondents. Our Asian/Pacific Islander category did not distinguish between the many groups that it may encompass; however, studies among South Asian women have cited strong patriarchal cultural norms as being linked to IPV.^{29,30} While race and ethnicity are not necessarily related to immigration status, for some women from this population, immigrant status may contribute to challenges in identifying resources and assistance, resulting in difficulty obtaining a divorce or otherwise leaving an abusive marriage.^{29,31} For Black women, lower marriage rates compared with White women have been known to exist for decades and, while not fully understood, some research suggests that there is a smaller pool of marriageable partners due to higher levels of incarceration and unemployment among Black men compared with other men,^{32–34} circumstances that are rooted in structural inequities and discriminatory practices and policies.^{35,36} Scarcity of partners and stigmatizing race-based stereotypes may influence rates of reproduction coercion among Black women via lowered sense of empowerment which in turn may influence lowered efficacy around negotiating reproductive choices.^{34,37,38}

In our study, health insurance status could be considered a proxy for income, and we found that a higher proportion of respondents who were Medicaid recipients at delivery experienced nonuse of contraception due to partner objection. A lower income may put individuals at increased risk due to challenges accessing IPV prevention resources or health care services (transportation, childcare, time off work) that could limit options to leave abusive relationships or access highly effective contraceptives. In the subgroup analysis by race/ethnicity, we noted a higher proportion of non-Hispanic Black respondents experiencing nonuse of contraception due to partner objection coercion were Medicaid recipients compared with non-Hispanic White or non-Hispanic Asian/Pacific Islander respondents. Lower median incomes and social and structural factors that result in a higher likelihood of having precarious employment for Black women may be among the drivers of these differences.^{39–41}

We found no association between the nonuse of contraception due to partner objection and substance use before, during, or after pregnancy. Our measure was from the time of conception, and while we hypothesized that people may have been at risk of experiencing violence and stressors that might lead to substance use before the incident, there were no differences found for substance use before pregnancy. Furthermore, we may not have observed an association during pregnancy or postpartum because the use of cigarettes, marijuana, and alcohol has been found to decrease during pregnancy and not fully rebound to prepregnancy levels in the early postpartum period.^{42–44} We also did not have information about lifetime experiences of coercion or other interpersonal violence that may be more strongly associated with substance use.⁴⁵

We found that the prevalence of self-reported postpartum depressive symptoms was significantly higher among respondents who reported nonuse of contraception due to partner objection compared with those who did not. Other research has identified a relationship between reproductive coercion and depression. For example, an association of reproductive coercion with depression and posttraumatic stress disorder was found among a community-based convenience sample of Black adolescent and young adult women.⁴⁶ In general, exposure to IPV around the time of pregnancy has been linked with poor mental health.⁴⁷

We found a significant association with a reduced likelihood of attending a prepregnancy visit, entering prenatal care in the first trimester, and attending a postpartum care visit. Other studies of reproductive coercion among the general population have found the experience associated with frequent clinic visits for pregnancy tests, emergency contraception, and testing for sexually transmitted infections.⁴⁸ However, individuals in our study were already pregnant and would no longer need some of these services. Aligning with our findings, experiencing IPV, in general, has been associated with reduced access to health care services, and individuals may face other challenges seeking services in the context of a relationship with a controlling partner.⁴⁹

The strongest association in our study was between the nonuse of contraception due to partner objection at the time of conception and reports that the husband or partner was still objecting postpartum. If the respondent's circumstances and partner are the same after the pregnancy, it is not surprising that the partner's behavior persists in the postpartum period. A study of undergraduate women found that those who experienced reproductive coercion had a reduced rate of self-efficacy and contraception use,⁵⁰ which may also be relevant in our study population. This may be an area of opportunity for intervention.

This study has several limitations. Data represent individuals from the 22 jurisdictions included in the analysis and are not generalizable beyond the study sites. PRAMS respondents are individuals who had a live birth, so these findings do not represent individuals who experienced pregnancy outcomes such as stillbirth, abortion, or miscarriage. Information is self-reported in the postpartum period and may be subject to recall and social desirability biases and may lead to underreporting. Although the data are weighted to be representative of the population of people with a live birth in each jurisdiction, we had a small sample for some racial and ethnic groups that limited the ability to calculate reliable

estimates and may have limited our ability to identify disparities in experiences, in particular American Indian/Alaska Native, Asian/Pacific Islander, and multiracial respondents.

Our measure of nonuse of contraception due to partner objection and unintended pregnancy was not a traditional or validated measure of reproductive coercion and differs from measures used in other studies. However, this study is not unlike other studies in capturing only select aspects of reproductive coercion, such as potential contraceptive sabotage. Also, while other studies have documented adverse outcomes among people experiencing mistimed, unwanted (unintended), and unsure pregnancies compared with those reporting intended pregnancies,^{23,51} we recognize the complex nature, historical context, and challenges with measurement of this concept which may not resonate with all respondents and could be particularly problematic for respondents from marginalized racial and ethnic groups.⁵² Given these various limitations, our estimates likely underestimate experiences of potentially coercive contraceptive behaviors by partners at the time of conception among people with a recent live birth. Nevertheless, the study provides valuable insight into health outcomes around the time of pregnancy among a large, population-based sample of individuals with a recent live birth.

Prevention of reproductive coercion may be addressed using evidence-based strategies. For example, programs that teach about healthy sexuality and healthy relationships can promote communications skills and help with setting expectations for respectful relationships starting with adolescents and young adults.^{53,54} Other approaches to promoting adult and adolescent sexual and reproductive health include comprehensive sexual education,^{55–57} economic support programs,⁵⁸ strategies that address social norms changes, and the creation of protective environments.^{53,54} It is encouraging that empowerment-based programs have shown promising results on sexual health outcomes and have been implemented in diverse populations, including youth, college students, individuals with intellectual disabilities, and justice-involved women.^{59–62}

Screening and referrals by health care providers are important first steps to identifying individuals who are experiencing IPV or reproductive coercion and connecting them with services.³ Consistent with another study using PRAMS data, we found that about one in four women in our study were not asked about IPV during prenatal care visits.⁶³ Universal screening is recommended during prenatal care,⁶⁴ and there may be missed opportunities for this population.⁴ Health providers may also promote sexual and reproductive health through supportive conversations about contraceptive use.⁶⁵ Training for health care providers on available screening tools and information on available resources may facilitate more widespread screening.⁶⁶

Conclusions

Findings from this study shed light on the relationship between nonuse of contraception due to partner objection as one aspect of reproductive coercion and lower prevalence of health care utilization, higher postpartum depressive symptoms, and higher prevalence of nonuse of contraception due to partner objection in the postpartum period. Prevention efforts may include strategies that increase awareness about reproductive coercion and the use of

evidence-based approaches that help create protective environments, teach about healthy relationships, and empower individuals to enhance self-efficacy related to reproductive choices and reproductive autonomy.

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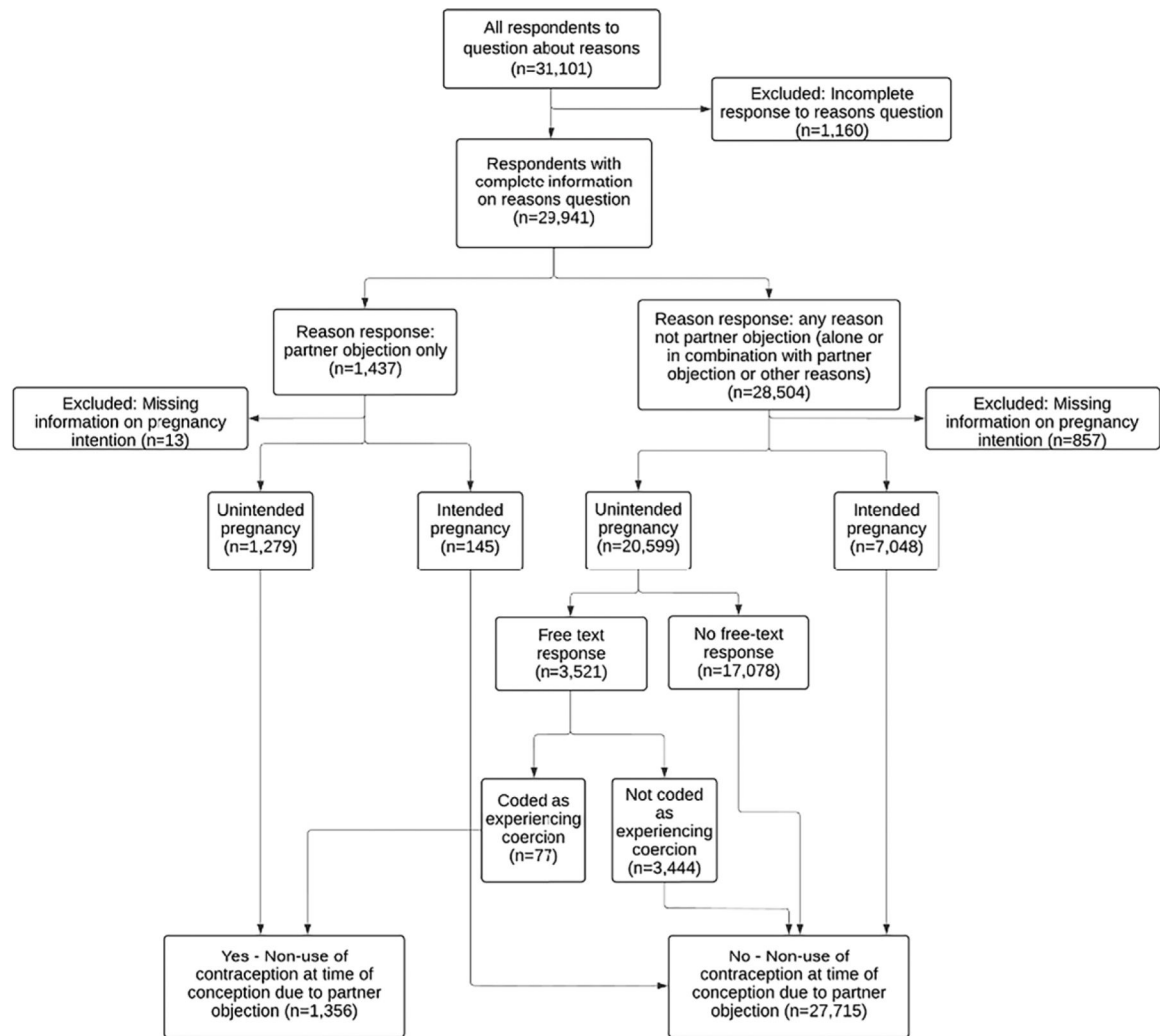


FIG. 1.
Reasons for nonuse of contraception at time of conception flowchart.

Table 1.

PREVALENCE OF NONUSE OF CONTRACEPTION DUE TO PARTNER OBJECTION AND UNINTENDED PREGNANCY AMONG INDIVIDUALS WITH A RECENT LIVE BIRTH BY SELECTED CHARACTERISTICS, PREGNANCY RISK ASSESSMENT MONITORING SYSTEM, 2016–2020^a

	n ^b	Nonuse of contraception due to partner objection and unintended pregnancy (n = 1,356)		Did not experience nonuse of contraception due to partner objection (n = 27,715)		Chi-square p-value
		% c	95% CI	% c	95% CI	
Overall	29,071	4.8	4.4–5.2	95.3	94.9–95.6	
Demographics						
Age						
<20	1,971	5.7	4.5–7.2	94.3	92.8–95.5	0.0000
20–24	7,074	6.2	5.3–7.2	93.8	92.8–94.7	
25–34	15,167	4.5	4.0–5.0	95.5	95.0–96.0	
≥35	4,859	2.9	2.3–3.7	97.1	96.3–97.7	
Race/ethnicity						
White, non-Hispanic	10,016	4.0	3.5–4.6	96.0	95.4–96.5	0.0000
Black, non-Hispanic	10,055	6.5	5.7–7.4	93.5	92.6–94.3	
American Indian/Alaskan Native, non-Hispanic	510	7.6	3.4–16.2	92.4	83.8–96.6	
Asian/Pacific Islander, non-Hispanic	1,915	4.0	3.0–5.4	96.0	94.6–97.0	
Multiracial, non-Hispanic	1,523	7.5	5.2–10.9	92.5	89.1–94.8	
Hispanic	4,795	3.7	2.9–4.7	96.3	95.3–97.1	
Marital status						
Married	11,392	3.6	3.1–4.1	96.4	95.9–96.9	0.0000
Unmarried with acknowledgment of paternity	10,399	4.7	4.2–5.4	95.3	94.6–95.8	
Unmarried without acknowledgment of paternity	5,718	7.8	6.6–9.1	92.2	90.9–93.4	
Education level (years)						
Less than high school	4,569	5.6	4.7–6.8	94.4	93.2–95.3	0.0000
High school	9,443	5.8	5.1–6.6	94.2	93.4–94.9	
More than high school	14,854	3.7	3.3–4.2	96.3	95.8–96.7	
Disability ^d						
Yes	575	3.4	1.9–6.0	96.6	94.0–98.1	0.3127

	<i>n</i> ^b	Nonuse of contraception due to partner objection and unintended pregnancy (<i>n</i> = 1,356)		Did not experience nonuse of contraception due to partner objection (<i>n</i> = 27,715)		Chi-square p-value
		% c	95% CI	% c	95% CI	
No	5,533	4.6	3.6–5.7	95.4	94.3–96.4	
Health care						
Health insurance at delivery						
Private	10,324	2.8	2.4–3.3	97.2	96.7–97.6	0.0000
Medicaid	17,293	6.1	5.5–6.7	93.9	93.3–94.5	
None	786	3.7	2.1–6.3	96.3	93.7–97.9	
Other	476	4.1	2.2–7.7	95.9	92.3–97.8	
Health care provider asked about emotional or physical abuse before pregnancy ^e						
Yes	8,611	3.8	3.3–4.5	96.2	95.5–96.7	0.3504
No	7,351	4.3	3.6–5.0	95.7	95.0–96.4	
Health care provider asked about emotional or physical abuse during pregnancy ^e						
Yes	21,831	4.6	4.2–5.1	95.4	94.9–95.8	0.2899
No	6,119	5.1	4.4–6.0	94.9	94.0–95.6	
Relationship factors						
Experienced physical intimate partner violence before pregnancy						
Yes	1,306	9.9	7.5–13.0	90.1	87.0–92.5	0.0002
No	26,835	4.5	4.1–4.9	95.5	95.1–95.9	
Experienced physical intimate partner violence during pregnancy						
Yes	886	11.0	8.3–14.5	89.0	85.5–91.7	0.0001
No	27,198	4.6	4.2–5.0	95.4	95.0–95.8	

^aTwenty-two jurisdictions: Alabama, Arkansas, Connecticut, Florida, Georgia, Hawaii, Illinois, Iowa, Louisiana, Kentucky, Massachusetts, Maine, Michigan, Missouri, North Carolina, Nebraska, New Jersey, New York State, New York City, Oregon, Tennessee, and Washington.

^bUnweighted *n*.

^cWeighted row percentage.

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^d Respondent indicated having “a lot of difficulty” or “cannot do at all” on one or more six functional types of disability: remembering, seeing, hearing, communicating, walking/climbing stairs, and self-care. Disability data collected included Georgia 10/2018–12/2020; Louisiana 8/2018–12/2020; Massachusetts 10/2018–12/2020; Maine 4/2019–12/2020; Michigan 9/2018–12/2020; Missouri 10/2018–12/2020; Nebraska 9/2018–12/2020; New York 1/2019–12/2020; Oregon 10/2018–6/2019, 3/2020–12/2020; and Tennessee 1/2020–12/2020.

^e Among individuals who attended a health care visit.

CI, confidence interval.

Table 2.

SELECTED CHARACTERISTICS OF INDIVIDUALS WITH A RECENT LIVE BIRTH WHO REPORTED NONUSE OF CONTRACEPTION DUE TO PARTNER OBJECTION AND UNINTENDED PREGNANCY BY RACE AND ETHNICITY, PREGNANCY RISK ASSESSMENT MONITORING SYSTEM, 2016–2020^a

	White, non-Hispanic (n = 380)		Black, non-Hispanic (n = 593)		Asian/Pacific Islander, non-Hispanic (n = 84)		Multiracial, non-Hispanic (n = 84)		Hispanic (n = 180)	
	% ^b	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Maternal demographics										
Age										
<20	8.0	5.2–12.0	8.8	6.3–12.3	1.2	0.3–4.6	12.4	4.7–29.1	8.2	4.5–14.4
20–24	33.8	28.0–40.1	30.1	24.0–37.0	14.6	6.7–28.7	45.1	27.1–64.6	39.2	28.1–51.6
25–34	50.8	44.4–57.2	51.6	44.8–58.4	57.0	42.1–70.7	34.0	18.8–53.6	40.1	29.1–52.1
>=35	7.5	4.6–11.8	9.5	6.6–13.5	27.3	16.0–42.4	8.4	2.9–22.0	12.6	7.1–21.4
Marital status										
Married	39.3	33.2–45.7	19.2	14.5–24.9	80.1	66.9–88.9	28.4	14.1–49.0	30.4	20.6–42.4
Unmarried with acknowledgment of paternity	37.8	31.7–44.4	42.1	35.4–49.1	18.8	10.2–32.1	39.9	23.0–59.7	41.3	30.1–53.5
Unmarried without acknowledgment of paternity	22.9	17.8–28.9	38.7	32.1–45.7	1.1	0.4–3.5	31.6	16.6–51.9	28.3	17.3–42.5
Education level (years)										
<12	15.2	11.2–20.2	11.8	8.6–15.8	17.6	8.9–31.8	29.9	16.2–48.6	42.3	30.6–54.9
12	43.1	36.8–49.6	46.5	39.8–53.4	14.7	6.8–28.8	36.4	19.5–57.5	33.4	23.6–45.0
>12	41.7	35.5–48.2	41.7	35.3–48.4	67.7	52.5–79.9	33.7	18.7–53.0	24.3	17.0–33.6
Disability ^c										
Yes	6.8	1.9–21.6	6.1	2.9–12.3	n/a ^d	n/a ^d	n/a ^d	n/a ^d	10.7 ^e	3.7–27.3
No	93.2	78.4–98.1	93.9	87.7–97.1	n/a ^d	n/a ^d	n/a ^d	n/a ^d	89.3 ^e	72.7–96.4
Health care Health insurance at delivery										
Private	26.1	21.0–32.0	16.7	12.7–21.8	54.6	39.7–68.8	28.9	13.8–50.9	18.4	11.6–28.0
Medicaid	69.6	63.4–75.1	80.8	75.5–85.2	43.1	29.1–58.3	70.5	48.7–85.8	74.3	63.7–82.6
None	2.9	1.2–7.0	1.1	0.4–2.8	0.3	0.1–0.8	0.1	0.0–0.5	3.3	1.3–8.1
Other	1.4	0.5–4.1	1.4	0.5–4.4	2.0	0.4–8.7	0.5	0.1–3.2	4.0	1.2–12.9

	White, non-Hispanic (n = 380)		Black, non-Hispanic (n = 593)		Asian/Pacific Islander, non-Hispanic (n = 84)		Multiracial, non-Hispanic (n = 84)		Hispanic (n = 180)	
	% ^b	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Health care provider asked about emotional or physical abuse before pregnancy ^f										
Yes	46.8	38.3–55.5	49.7	40.5–59.0	42.8 ^e	21.3–67.4	44.4 ^e	20.5–71.2	52.2	36.7–67.3
No	53.2	44.5–61.7	50.3	41.0–59.5	57.2 ^e	32.6–78.7	55.6 ^e	28.8–79.5	47.8	32.7–63.3
Health care provider asked about emotional or physical abuse during pregnancy ^f										
Yes	71.8	65.6–77.2	78.9	72.9–83.9	72.3	57.4–83.4	72.8	51.8–86.9	73.5	61.4–82.8
No	28.2	22.8–34.4	21.1	16.1–27.1	27.8	16.6–42.6	27.2	13.1–48.2	26.5	17.2–38.6
Relationship factors Experienced physical intimate partner violence before pregnancy										
Yes	10.4	7.2–14.9	7.0	4.5–10.8	3.8	0.6–19.8	13.3	4.1–35.3	7.5	1.9–25.6
No	89.6	85.1–92.8	93.0	89.2–95.5	96.2	80.2–99.4	86.7	64.7–95.9	92.5	74.5–98.1
Experienced physical intimate partner violence during pregnancy										
Yes	6.3	4.0–9.7	7.1	4.6–11.0	3.6	0.6–20.4	12.5	3.6–35.2	1.5	0.7–3.3
No	93.7	90.3–96.0	92.9	89.0–95.4	96.4	79.6–99.5	87.6	64.8–96.4	98.5	96.7–99.3

^a Twenty-two jurisdictions: Alabama, Arkansas, Connecticut, Florida, Georgia, Hawaii, Illinois, Iowa, Louisiana, Kentucky, Massachusetts, Maine, Michigan, Missouri, North Carolina, Nebraska, New Jersey, New York State, New York City, Oregon, Tennessee, and Washington; unweighted $n = 1,343$.

^b Weighted row percentage.

^c Respondent indicated having “a lot of difficulty” or “cannot do at all” on one or more six functional types of disability: remembering, seeing, hearing, communicating, walking/climbing stairs, and self-care. Disability data collected included Georgia 10/2018–12/2020; Louisiana 8/2018–12/2020; Massachusetts 10/2018–12/2020; Maine 4/2019–12/2019; Michigan 9/2018–12/2020; Missouri 10/2018–12/2020; Nebraska 9/2018–12/2020; New York: 1/2019–12/2019; Oregon 10/2018–6/2019, 3/2020–12/2020; and Tennessee 1/2020–12/2020.

^d Estimates not shown, denominator <30.

^e Estimates potentially unreliable, denominator >30 to <60.

^f Among individuals who attended a health care visit.

CI, confidence interval.

Table 3.

ASSOCIATION BETWEEN PARTNER OBJECTION TO CONTRACEPTIVE USE AND UNINTENDED PREGNANCY AND PREGNANCY-RELATED BEHAVIORS, EXPERIENCES, AND OUTCOMES AMONG INDIVIDUALS WITH A RECENT LIVE BIRTH, PREGNANCY RISK ASSESSMENT MONITORING SYSTEM 2016–2020^a

<i>Behavioral risk factors and health conditions</i>	<i>Prevalence</i>			<i>Nonuse of contraception due to partner objection and unintended pregnancy versus Did not experience nonuse of contraception due to partner objection and unintended pregnancy</i>	
	<i>n^b</i>	<i>%^c</i>	<i>95% CI</i>	<i>aPR^d</i>	<i>95% CI</i>
Cigarette smoking during the 3 months before pregnancy					
Yes	7,096	24.3	23.6–25.0	1.2	1.0–1.4
No	21,489	75.7	75.0–76.4	1.0	
Cigarette smoking during the last 3 months of pregnancy					
Yes	3,917	12.8	12.2–13.4	1.2	1.0–1.5
No	24,696	87.2	86.7–87.8	1.0	
Postpartum cigarette smoking					
Yes	5,161	17.2	16.6–17.9	1.2	1.0–1.5
No	23,426	82.8	82.1–83.4	1.0	
Heavy drinking during the 3 months before pregnancy ^e					
Yes	816	3.0	2.7–3.3	1.2	0.8–1.9
No	27,658	97.1	96.7–97.3	1.0	
Binge drinking during the 3 months before pregnancy ^f					
Yes	1,189	37.4	35.0–39.9	0.9	0.5–1.6
No	1,891	62.6	60.1–65.0	1.0	
Any drinking during the last 3 months of pregnancy ^g					
Yes	997	6.9	6.3–7.6	1.3	0.8–2.1
No	13,439	93.1	92.4–93.7	1.0	
Use of marijuana or illicit substances before pregnancy ^h					
Yes	757	15.7	14.2–17.3	1.0	0.6–1.6
No	2,370	84.3	82.7–85.8	1.0	
Use of marijuana or illicit substances during pregnancy ⁱ					
Yes	661	10.8	9.6–12.1	0.8	0.4–1.6
No	4,814	89.3	88.0–90.4	1.0	
Prepregnancy depression					

<i>Behavioral risk factors and health conditions</i>	<i>Prevalence</i>			<i>Nonuse of contraception due to partner objection and unintended pregnancy versus Did not experience nonuse of contraception due to partner objection and unintended pregnancy</i>	
	<i>n^b</i>	<i>%^c</i>	<i>95% CI</i>	<i>aPR^d</i>	<i>95% CI</i>
Yes	4,985	16.8	16.2–17.5	1.1	0.9–1.3
No	23,760	83.2	82.5–83.8	1.0	
Depression during pregnancy					
Yes	5,072	16.8	16.2–17.5	1.2	1.0–1.5
No	23,384	83.2	82.5–83.8	1.0	
Postpartum depressive symptoms					
Yes	5,031	16.3	15.7–16.9	1.3	1.1–1.6
No	23,168	83.7	83.1–84.3	1.0	
Health care access/utilization Prepregnancy health care visit					
Yes	16,037	56.6	55.7–57.5	0.8	0.7–0.9
No	12,585	43.4	42.5–44.3	1.0	
First trimester prenatal care					
Yes	22,867	81.6	81.0–82.3	0.7	0.6–0.9
No	5,358	18.4	17.7–19.1	1.0	
Postpartum checkup					
Yes	24,199	86.4	85.8–87.0	0.7	0.6–0.9
No	4,130	13.6	13.0–14.2	1.0	
Postpartum contraceptive practices Any use of postpartum contraception					
Yes	19,788	71.2	70.4–72.0	0.9	0.8–1.1
No	8,442	28.8	28.0–29.6	1.0	
Postpartum long-acting reversible contraception (IUD or implant)					
Yes	4,680	15.5	14.9–16.2	0.9	0.7–1.2
No	24,391	84.5	83.9–85.1	1.0	
Postpartum female sterilization					
Yes	3,126	10.6	10.1–11.2	1.3	1.0–1.6
No	25,945	89.4	88.8–89.9	1.0	
Husband or partner didn't want to use a postpartum method ^f					
Yes	978	12.1	11.1–13.3	2.8	2.1–3.9
No	7,057	87.9	86.8–88.9	1.0	

Behavioral risk factors and health conditions	Prevalence			Nonuse of contraception due to partner objection and unintended pregnancy versus Did not experience nonuse of contraception due to partner objection and unintended pregnancy	
	n ^b	% ^c	95% CI	aPR ^d	95% CI
Birth outcomes					
Birthweight ^k					
Low birth weight	5,339	8.1	7.8–8.4	1.0	0.8–1.2
Normal birth weight	22,925	91.9	91.6–92.2	1.0	
Preterm ^k					
Yes	4,652	9.3	8.9–9.7	0.8	0.7–1.0
No	23,585	90.7	90.3–91.1	1.0	
Small for gestational age ^k					
Yes	4,043	10.8	10.3–11.3	1.0	0.8–1.3
No	24,178	89.2	88.7–89.7	1.0	

^aTwenty-two jurisdictions: Alabama, Arkansas, Connecticut, Florida, Georgia, Hawaii, Illinois, Iowa, Louisiana, Kentucky, Massachusetts, Maine, Michigan, Missouri, North Carolina, Nebraska, New Jersey, New York State, New York City, Oregon, Tennessee, and Washington.

^bUnweighted $n = 29,071$; may vary by indicator due to missing data.

^cWeighted row percentage.

^dAdjusted for age, race, marital status, and health insurance at delivery.

^eHeavy drinkers drank eight or more drinks per week, all states.

^fBinge drinkers drank four or more drinks on one or more occasion; jurisdictions included Hawaii, Iowa, Maine, Nebraska, and New Jersey.

^gJurisdictions included: Connecticut, Georgia, Hawaii, Louisiana, Maine, Missouri, North Carolina, Nebraska, New Jersey, New York State, Tennessee, and Washington.

^hJurisdictions included Louisiana, Kentucky, and Maine.

ⁱJurisdictions included Alabama, Connecticut, Florida, Georgia, Iowa, Illinois, Louisiana, Kentucky, Massachusetts, Missouri, New York State, Oregon, Tennessee, and Washington.

^jAmong women not using a method of postpartum contraception.

^kRestricted to singleton deliveries; low birth weight <2,500 g, preterm: <37 weeks gestation; small for gestational age: weight <10th percentile for age. aPR, adjusted prevalence ratio; CI, confidence interval; IUD, intrauterine device.