Published in final edited form as:

Health Care Women Int. 2018 September ; 39(9): 968–974. doi:10.1080/07399332.2018.1490740.

Reproductive Coercion and Prenatal Distress among Young Pregnant Women in Monrovia, Liberia

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Abstract

Women who experience reproductive coercion may be at risk for poor reproductive health, but few studies have examined the potential mental health consequences. Using cross-sectional data of 195 pregnant women aged 18–30 in Monrovia, Liberia, we examined the association between reproductive coercion and prenatal distress. The prevalence of reproductive coercion with the current pregnancy was 9% (n=12). Young pregnant women who experienced reproductive coercion had more prenatal distress than women without these experiences (B (SE) =4.337 (2.091), $p < .05$). Reproductive coercion can affect the mental health of young pregnant women in Liberia. Family planning programs and providers should assess reproductive coercion with the current pregnancy among young pregnant women and find ways to help women mitigate distressing symptoms.

Keywords

Reproductive coercion; Prenatal distress; Women; Liberia

Introduction

There is a growing concern regarding the impact of reproductive coercion on women's health. Reproductive coercion are behaviors in which a partner uses power and control tactics to influence reproductive choices and outcomes (American College of Obstetricians & Gynecologists, 2013). Reproductive coercion has been characterized as *condom manipulation*, direct interference of contraception use, and *pregnancy coercion*, coercive behaviors that promote pregnancy (McCauley et al., 2016). The burgeoning body of research in high-income countries estimates the prevalence of reproductive coercion experienced by

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Conflict of Interest: TCW and TAC declare that they have no conflict of interest.

women between 9% and 25% (Black et al., 2011; Miller et al., 2010). Women who experience reproductive coercion are at increased risk for unintended pregnancies (Miller et al., 2010), higher interest in HIV prevention methods (Willie et al., 2017), and concomitant intimate partner violence (Willie et al., 2017). Studies in low- and middle-income countries have documented women's limited agency in reproductive health decision-making (WHO, 2009), yet there is a dearth of literature examining the effects of reproductive coercion.

Few studies have examined reproductive coercion in low- and middle-income countries. One study conducted in Cote d'Ivoire found that 19% of women experienced reproductive coercion (McCauley, Falb, Streich-Tilles, Kpebo, & Gupta, 2014). This study also found that women who experience reproductive coercion had a greater odds of posttraumatic stress disorder symptoms compared to women without these experiences (McCauley et al., 2014). These findings suggest that being forced into a reproductive choice against her wishes could result in more psychological distress. Extending this research, being coerced into a pregnancy without consent may also lead to high stress during pregnancy, an important antecedent of pregnancy complications (Class, Lichtenstein, Långström, & D'onofrio, 2011). Understanding factors may heighten women's risk of developing antecedents of pregnancy complications is key for countries disproportionately affected by maternal and infant mortality.

Understanding the mental health consequences of reproductive coercion among young pregnant women in Liberia is critical. Several social and structural factors contribute to these poor maternal-child outcomes. For example, between 1989 and 2003, Liberia experienced one of the brutalist civil wars in African history, and during rebuild phase in 2014, Liberia faced an Ebola outbreak. The civil war devastated infrastructures, compromised the healthcare system, and normalized violence against women—placing women and children at the epicenter of adverse health outcomes (Author Citation, 2013). The interplay of pro-violent attitudes of violence against women, a damaged healthcare system's reputation, and reduced availability of sexual and reproductive health service may have increased young women's vulnerability to reproductive coercion and reduced accessibility to providers trained on the mental health consequences of reproductive health. It possible that these compounded social, structural, and economic vulnerabilities could place additional stress on young Liberian women during their pregnancy. Thus, further exploration of the impact of reproductive coercion on the mental health of *currently* pregnant women living in Liberia is warranted. Examining the relationship between reproductive coercion and stress during pregnancy among young pregnant women is needed to inform programs and other opportunities to improve maternal mental health. Thus, we aim to examine the association between reproductive coercion with the current pregnancy and prenatal distress among young pregnant Liberian women.

Materials and Methods

The data was obtained by the principal investigator from a larger pilot study which examined facilitators and barriers to mental and sexual health intervention programming as well as risk and protective factors for adverse mental and sexual health outcomes. Between March 2016 and August 2016, 195 pregnant women who received prenatal care from the community

health clinic in Monrovia, Liberia were referred by a clinic staff member to participate in a cross-sectional study. Potential participants were screened and deemed eligible based on the following criteria: (a) receiving/received prenatal services from a local community health clinic (the clinic has 17 catchment areas in Montserrado country); (b) age 18 – 30 years old; (c) residing in Montserrado county; (d) between 13 and 24 weeks of gestational age; and (e) no pregnancy-related medical problems. Research assistants obtained consent for eligible participants, and these participants completed a 90-minute questionnaire. Research assistants were available to help administer both the screen and 90-minute questionnaire using a computer-assisted personal interview (CAPI) program. Participants were compensated \$7 USD for their time and travel, and provided a meal. Informed consent was obtained from all individual participants included in the study. All study procedures were approved by the both U.S. and Liberian-based Institutional Review Board.

Measures included in this study were thoroughly developed and evaluated based on the Beaton et al. 2000 process. This cultural adaption process included: translation to Liberian English and back translation to English with community partners, creating equivalency between original assessment tools and Liberian context with key informants, and working with local experts to finalize assessment materials. These measures were also modified to be culturally- and developmentally-appropriate for pregnant young women.

Reproductive coercion with the male partner of the current pregnancy, was assessed items from Miller et al. (2010) and modified for the current pregnancy (Willie et al., 2017). An affirmative answer was coded as experiencing reproductive coercion.

Prenatal distress was assessed using the 18-item Prenatal Distress Questionnaire (Lobel et al., 2008). Participants were asked to answer questions about stressful experiences that commonly occur during pregnancy on a 3-point Likert scale ranging from 0 (*not at all*) to 2 (*everyday*). Responses were summed to create a total score, with higher values indicates more stress during pregnancy. The Cronbach's alpha was 0.88.

Participants reported socio-demographics such as age (in years), level of education (i.e., no schooling, primary, secondary, and high school or greater), relationship status (i.e., currently in a romantic relationship or not), and employment status (working and not working).

Descriptive statistics (frequencies, means) and correlations were conducted to assess relationships between all study variables. Linear regression models were conducted to examine the unadjusted and adjusted associations between reproductive coercion and prenatal distress. Covariates significantly associated with any predictor at the $p < .05$ level were included in adjusted models. Regression associations were assessed for significance at the p -value $< .05$ level. All analyses were conducted among women with non-missing data for all study variables, resulting in a final sample of 133 women. Sensitivity analyses were conducted to examine significant differences between women with ($n=133$) and without missing data ($n=62$). Women with missing data were slightly younger and more likely to be employed ($ps < .05$) All analyses were conducted using SAS 9.4 (SAS Institute, Cary, NC).

Results

The average age was 23.8 years (SD=3.6 years), 71 women (36.6%) had at least a high school education, 38% were working, and 88% reported being in a relationship (Table 1).

In the sample, 9% of women reported reproductive coercion with the current pregnancy. Linear regression results revealed a significant positive association between reproductive coercion and prenatal distress ($B (SE) = 4.337 (2.091), p < .05$) (Table 2).

Discussion

The present study examined the associations between reproductive coercion and prenatal distress among young pregnant Liberian women. Our findings suggest that women who experience reproductive coercion endure more prenatal stress than women without these experiences. Reproductive coercion may present as a threat to women's mental health during pregnancy. It is possible that women who are forced to have children against their wishes are experiencing other violations of their reproductive rights, such as fear to seek advice about family planning, negotiating condom use, and sexual consent. Therefore, men's control over women's reproductive choices may create a stressful environment and if the pregnancy continues to term, then the pregnancy may be a constant trigger for this imbalanced power dynamic in her relationship. Stress symptoms may emerge if women are fearful of retaliation from her partner by rejecting his wishes (McCauley et al., 2014). With the high population-level estimates for maternal deaths in Liberia (Loaiza & Liang, 2013), these relationships could be particularly salient for young pregnant women in Liberia as this group may stay with controlling male partners for economic resources which can be used to maintain their overall livelihood for themselves and other family members. Therefore, it is critically important to screen for reproductive coercion in clinics that focus on family planning women's health and/or other settings that provide prenatal services. Similarly, family planning programs need to be understanding of the mental health consequences of reproductive coercion and develop programs to help women mitigate associated stress during pregnancy.

Although this is one of the few studies to examine the mental health consequences of reproductive coercion among currently pregnant women, study limitations should be noted. The cross-sectional data limits causal inferences about reproductive coercion and prenatal distress. These analyses relied on self-reported data, which is subject to underreporting of reproductive coercion. Our sample comprised of pregnant Liberian women, and our findings were focused on prenatal distress which is not generalizable to women who are not expecting but other studies suggest a positive relationship between reproductive coercion and posttraumatic stress among nonexpecting women (McCauley et al., 2014).

Conclusions

This study provides preliminary evidence of the mental health consequences of reproductive coercion for young pregnant Liberian women. Prenatal programs targeting young Liberian women need to screen for reproductive coercion and provide mental health counseling and support throughout pregnancy.

Acknowledgments

The research described here was supported, in part, by grants from the Fogarty International Center (K01TW009660) and the National Institute of Mental Health (F31MH113508, T32MH020031; R25MH083620).

References

- Black MC, Basile KC, Breiding MJ, Smith SG, Walters ML, Merrick MT, & Stevens M (2011). National intimate partner and sexual violence survey. Atlanta, GA: Centers for Disease Control and Prevention.
- Class QA, Lichtenstein P, Långström N, & D'Onofrio BM (2011). Timing of prenatal maternal exposure to severe life events and adverse pregnancy outcomes: a population study of 2.6 million pregnancies. *Psychosomatic Medicine*, 73(3), 234. [PubMed: 21321257]
- Loaiza E, & Liang M (2013). Adolescent pregnancy: a review of the evidence. New York: UNFP.
- Lobel M, Cannella DL, Graham JE, DeVincent C, Schneider J, & Meyer BA (2008). Pregnancy-specific stress, prenatal health behaviors, and birth outcomes. *Health Psychology*, 27(5), 604. [PubMed: 18823187]
- McCauley HL, Falb KL, Streich-Tilles T, Kpebo D, & Gupta J (2014). Mental health impacts of reproductive coercion among women in Côte d'Ivoire. *International Journal of Gynecology & Obstetrics*, 127(1), 55–59. [PubMed: 24952817]
- McCauley HL, Silverman JG, Jones KA, Tancredi DJ, Decker MR, McCormick MC, . . . Miller E (2016). Psychometric properties and refinement of the Reproductive Coercion Scale. *Contraception*.
- Miller E, Decker MR, McCauley HL, Tancredi DJ, Levenson RR, Waldman J, . . . Silverman JG (2010). Pregnancy coercion, intimate partner violence and unintended pregnancy. *Contraception*, 81(4), 316–322. [PubMed: 20227548]
- Obstetricians, A. C. o., & Gynecologists. (2013). ACOG Committee opinion no. 554: reproductive and sexual coercion. *Obstetrics and Gynecology*, 121(2 Pt 1), 411. [PubMed: 23344307]
- Organization WH, Fund UNP, & Society KC f. W. s. H. i. (2009). Mental health aspects of women's reproductive health: a global review of the literature: World Health Organization.
- Willie TC, Powell A, Callands T, Sipsma H, Peasant C, Magriples U, ... & Kershaw T (2017). Investigating Intimate Partner Violence Victimization and Reproductive Coercion Victimization Among Young Pregnant and Parenting Couples: A Longitudinal Study.

Table 1

Means, Standard Deviations, and Correlations with Study Variables

	1	2	3	4	5	6
1. Age	-					
2. Employed ^a	.25**	-				
3. Relationship Status ^a	.05	-.02	-			
4. Education ^b	-.02	-.13	-.03	-		
5. Reproductive Coercion ^a	-.04	.09	-.30**	.12	-	
6. Prenatal Distress	-.19*	.08	-.15	.02	.22**	-
Mean	23.8	38%	88%	2	9%	9.8
Standard Deviation	3.6	50	118	-	12	6.6

*Note.** $p < .05$,** $p < .01$.^aData are % (N).^bMedian is shown.

Table 2

Associations between reproductive coercion and prenatal distress

	Unadjusted		Adjusted*	
	β (SE)	<i>p</i>	β (SE)	<i>p</i>
Reproductive Coercion				
Yes	5.127 (1.949)	<.01	4.337 (2.091)	<.05
No	Reference	---	Reference	---

* Adjusted for age, education, relationship status, and employment status. N=133.