ORIGINAL RESEARCH ARTICLE

Reproductive coercion and intimate partner violence among rural women in Côte d'Ivoire: a cross-sectional study

Kathryn L. Falb[1], Jeannie Annan[1], Denise Kpebo[2] and Jhumka Gupta[3]*

[1]International Rescue Committee, New York City, NY, USA; [2]Innovations for Poverty Action, Abidjan, Côte d'Ivoire; [3]Chronic Disease Epidemiology, Yale School of Public Health, New Haven, CT, USA, Center for Interdisciplinary Research on AIDS, Yale University, New Haven, CT, USA

***For Correspondence:** *Email: Kathryn.falb@rescue.org; Phone: +1 (212).551.0972*

Abstract

A growing body of U.S.-based research demonstrates that reproductive coercion is an important consideration regarding the negative health impacts of intimate partner violence (IPV). However, less work on IPV and reproductive coercion has been done in West African settings. Cross-sectional data of 981 women who participated in the baseline survey of a randomized-controlled trial in rural, Côte d'Ivoire in October 2010 were analyzed for specific reports of reproductive coercion. Half (49.8%) of all women reported lifetime physical or sexual IPV, and nearly 1 in 5 (18.6%) reported experiencing reproductive coercion. In the final adjusted analyses, lifetime IPV was associated with a 3.7 increase in odds of reporting reproductive coercion (95% CI: 2.4 – 5.8) compared to women who did not report such victimization. Study findings underscore the importance of reducing IPV in order to improve reproductive health among women in rural Côte d'Ivoire. *(Afr J Reprod Health 2014; 18[4]: 61-69).*

Keywords: Reproductive control, Ivory Coast, reproductive decision-making, contraception, violence against women

Résumé

Un nombre croissant de recherches aux États-Unis démontre que la coercition en matière de reproduction est un facteur important en ce qui concerne les impacts négatifs sur la santé de la violence du partenaire intime (VPI). Cependant, moins de travail sur le VPI et de coercition de la reproduction a été fait dans les paramètres Afrique de l'Ouest. Les données transversales de 981 femmes qui ont participé à l'enquête de base d'un essai randomisé contrôlé dans les régions rurales, la Côte d'Ivoire en Octobre 2010 ont été analysés pour les rapports spécifiques de contrainte en matière de reproduction. La moitié (49, 8%) de toutes les femmes vivant rapporté VPI physique ou sexuelle, et près de 1 sur 5 (18, 6%) ont déclaré avoir subi la contrainte de reproduction. Dans les analyses ajustées finales, la durée de vie VPI a été associée à une augmentation de 3,7 dans les cotes de la coercition rapports de reproduction (IC à 95%: 2.4 à 5.8) comparativement aux femmes qui ne ont pas déclaré cette victimisation. Résultats de l'étude soulignent l'importance de réduire VPI afin d'améliorer la santé de la reproduction chez les femmes en milieu rural en Côte d'Ivoire. *(Afr J Reprod Health 2014; 18[4]: 61-69).*

Mots-clés: contrôle de la reproduction, la Côte d'Ivoire, la prise de décision en matière de reproduction, la contraception, la violence contre les femmes

Introduction

Male perpetrated intimate partner violence (IPV) against women is an egregious human rights concern that has been estimated to occur among 15 to 76%[1,2] of women across multiple global settings at some point in their lifetime. An extensive body of research has documented a range of negative reproductive health consequences arising from women's experiences with IPV which includes unintended pregnancy, fetal loss, maternal morbidity and mortality, and increased vulnerability to sexually transmitted infections, including HIV[3-8]. As such, there are increasing efforts to better understand the specific mechanisms by which such violence can impact a woman's reproductive health. In both developed and developing country settings, women's lack of control over reproductive health decisions where violence is present, has been underscored as an important element underlying such relationships[9-11].

In addition to reproductive decision-making, a growing body of research has also demonstrated

how reproductive coercion, which can involve explicit pressure from the partner to become pregnant, or actual manipulation of birth control, can increase a women's vulnerability to poor reproductive health in situations where IPV is present[12,13]. To date, however, the majority of this research has taken place with populations within the United States, with an emphasis on attendees of health clinics that focus on the provision of reproductive health /family planning services[14]. The extent to which such findings apply in other contexts, particularly in developing countries, including those impacted by conflict as well as non-clinical settings, is currently unclear.

The investigation of the potential links between IPV and reproductive coercion is of particular importance in developing country contexts. In Côte d'Ivoire, a West African nation that has been grappling with armed conflict and political instability for over a decade, both IPV and poor reproductive health of women are concerns. Community-based work has documented that 47% of rural Ivorian women report having ever experienced IPV from a male partner[15]. Equally grim are this country's key reproductive health indicators as almost 30% of women are reported to have unmet family planning needs[16] and a woman has a 1 in 53 risk of maternal death[17]. It is important to situate these sexual and reproductive health statistics in current global development agendas where increasing a woman's utilization of family planning is being re-highlighted as a key development priority within the Millennium Development Goals[18]. Prominent within these discussions is the prioritization of a woman's decision-making processes and autonomy regarding family planning or other reproductive health care utilization[18]. Therefore, it is critical to examine partner-perpetrated reproductive coercion within Côte d'Ivoire as well as other developing nations, including those impacted by political conflict. Such investigations should include the relationship reproductive coercion may have with other forms of victimization, given the potential dual burden women face in these contexts and compounding of negative effects on reproductive health.

The investigation of IPV and male partner perpetrated reproductive coercion is further indicated by a recent study with rural Ivorian women which documented that women who reported abuse from in-laws were more likely to experience reproductive coercion from their male partners' family members[19]. IPV from partners and abuse from in-laws have been documented to co-occur in other global contexts[20-22]. Similar to violence perpetration, a comparable relationship may be seen regarding male-perpetrated reproductive coercion. Thus, the objectives of the current study are to: 1) document the lifetime prevalence of physical and/or sexual IPV; 2) document the forms of male partner perpetrated reproductive coercion, and 3) investigate the relationship between lifetime IPV experiences and partner perpetrated reproductive control among partnered women residing in rural Côte d'Ivoire.

Methods

Subjects and settings

This secondary analysis used data from a baseline survey of a community-based randomized controlled trial (trial registration number NCT01629472) led by Yale School of Public Health (YSPH), and Innovations for Poverty Action (IPA) in partnership with the International Rescue Committee (IRC), The objective of the parent trial was to assess the effectiveness of village savings and loans programs with gender dialogue groups in conflict-affected communities on the reduction of IPV. Rural villages were chosen for inclusion in the trial in northwestern Côte d'Ivoire; women were eligible for the intervention if they were over the age of 18 years and had no previous experience with microfinance. Further intervention details are found elsewhere[19-23]. For the present analysis, the study sample was restricted to women who reported having a partner at the time of the baseline survey.

Study procedures

Surveys were conducted with women with language matched female interviewers in a private location. Lifetime physical and/or sexual IPV was assessed via items from the WHO multi-country study on domestic violence and women's health[1].

Any affirmative response to an item was coded as experiencing IPV in a summary, binary variable. Lifetime reproductive coercion was assessed through nine items previously developed by Miller, et al[12] to assess pregnancy pressure and birth control sabotage. Specifically, women were asked if their partner has ever: (1) told you not to use birth control; (2) said he would leave you if you did not get pregnant; (3) told you he would have a baby with someone else if you didn't get pregnant; (4) tried to force or pressure you to become pregnant; (5) taken off a condom while you were having sex; (6) put holes in the condom so you would get pregnant; (7) taken your birth control away from you; and (8) made you have sex without a condom. An additional item asked the woman if she had ever hidden birth control from her partner because she was afraid he would get upset with her for using it. Any 'yes' response was coded as experiencing reproductive coercion in the final binary, summary variable. The scale demonstrated high internal consistency reliability (Cronbach's α=0.89).

Ethical approval

All study procedures received ethical approval from the Yale School of Public Health and Innovations for Poverty Action.

Statistical analysis

Descriptive statistics and bivariate associations were assessed between intimate partner violence, reproductive coercion, and demographic variables using Wald Type 3 effect p-values from bivariate generalized estimating equations (GEE) that accounted for clustering at the village level. Unadjusted and adjusted odds ratios were estimated through logistic GEE models. All analyses were conducted in SAS 9.2 and statistical significance was set at the $p < 0.05$ level.

Results

Sample Characteristics

A total of 1,273 women who were approached completed the survey; the overall response rate was 96%. Of these, 981 women reported having a male partner at the time of the survey (77.1%). Overall, almost one in five women reported lifetime partner-perpetrated reproductive coercion (18.6%) and almost half (49.8%) of women reported experiencing physical or sexual violence from their partner in their lifetime (Table 1). The mean age of women was 37.4 years and the majority had not received formal schooling (Table 2). The most common religion was Christian and the majority of respondents were of Yacouba ethnicity. Over 80% of women were married and nearly three-quarters of women had four or more pregnancies.

Table 1: Frequency of lifetime intimate partner violence and lifetime reproductive coercion (n=981).

	Reproductive Coercion % (n)	**No Reproductive Coercion % (n)**	**Total % (n)**
IPV % (n)	27.9 (136)	72.1 (352)	49.8 (488)
No IPV % (n)	9.3 (46)	90.7 (447)	50.3 (493)
Total % (n)	18.6 (182)	81.4 (799)	981

Table 2: Associations of participant characteristics and lifetime intimate partner violence and lifetime reproductive coercion (n=981).

	% (n) or Mean (SD)	**Lifetime IPV % (n) or Mean (SD)**	***P****	**Reproductive Coercion % (n) or Mean (SD)**	***P****	**Missing % (n)**
Age	37.4 (11.3)	36.8 (10.6)	0.2	34.5 (10.2)	0.005	0.0 (0)
Education						
None	71.4 (698)	46.7 (326)	0.0002	15.2 (106)	<0.0001	0.3 (3)
Primary	22.2 (217)	61.3 (133)		28.1 (61)		
Secondary or Higher	6.4 (63)	44.4 (28)		23.8 (15)		
Religion						

Christian	43.1 (423)	48.7 (206)	0.5	21.8 (92)	0.1	0.0 (0)
Muslim	17.0 (166)	45.2 (75)		10.8 (18)		
Traditional	16.8 (164)	51.2 (84)		18.3 (30)		
Other or None	23.2 (228)	54.0 (123)		18.4 (42)		
Ethnicity						
Yacouba	62.3 (611)	50.1 (306)	0.0002	19.8 (121)	0.01	0.0 (0)
Baoule	11.5 (113)	54.9 (62)		18.6 (21)		
Guere	7.1 (70)	57.1 (40)		21.4 (15)		
Senoufo	5.9 (58)	34.5 (20)		8.6 (5)		
Dioula	3.7 (36)	63.9 (23)		25.0 (9)		
Other	9.5 (93)	39.8 (37)		11.8 (11)		
Marital Status						
Married	84.3 (823)	49.1 (404)	0.06	16.2 (133)	0.003	0.5 (5)
Living with partner	11.0 (108)	58.3 (63)		31.5 (34)		
Not living with partner	4.6 (45)	44.4 (20)		28.9 (13)		
Number of Pregnancies						
0	3.0 (29)	37.9 (11)	0.1	24.1 (7)	0.3	0.0
1 – 3	24.0 (235)	46.8 (110)		23.8 (56)		
≥ 4	73.1 (717)	51.2 (367)		16.6 (119)		

*Wald Type 3 p-values derived from bivariate GEE models, adjusting for correlation at the village level

Table 3: Unadjusted and adjusted odds ratios estimates of reporting reproductive coercion among rural Côte d'Ivorian women.

	Unadjusted Reproductive Coercion Odds Ratio (95% CI)	***P****	**Adjusted Reproductive Coercion Odds Ratio (95% CI)**	***P****
Lifetime IPV (Physical or Sexual)				
Yes	3.8 (2.4 – 6.0)	<0.0001	3.7 (2.4 – 5.8)	<0.0001
No	Ref		Ref	
Age	0.97 (0.95 - 0.99)	0.005	0.98 (0.96 – 0.99)	0.03
Education				
None	Ref		Ref	
Primary	2.2 (1.7 – 2.8)	<0.0001	1.7 (1.3 – 2.4)	0.0004
Secondary or Higher	1.7 (1.1 – 2.7)	0.01	1.8 (1.0 – 3.0)	0.03
Religion				
Christian	Ref		Ref	
Muslim	0.4 (0.2 – 0.9)	0.02	0.3 (0.1 – 0.6)	0.001
Traditional	0.8 (0.5 – 1.2)	0.3	0.9 (0.7 – 1.4)	0.8
Other or None	0.8 (0.5 – 1.2)	0.3	0.7 (0.5 – 1.1)	0.1
Ethnicity				
Yacouba	Ref		Ref	
Baoule	0.9 (0.4 – 2.0)	0.8	0.7 (0.3 – 1.3)	0.2
Guere	1.1 (0.8 – 1.6)	0.6	0.8 (0.4 – 1.5)	0.5
Senoufo	0.4 (0.2 – 0.9)	0.02	1.2 (0.5 – 3.1)	0.7
Dioula	1.3 (0.6 – 2.8)	0.4	2.6 (1.1 – 6.0)	0.02
Other	0.5 (0.3 – 0.9)	0.05	0.6 (0.4 – 0.9)	0.04
Marital Status				
Married	Ref		Ref	
Living with partner	2.4 (1.3 – 4.4)	0.007	1.6 (0.8 – 2.9)	0.2
Not living with partner	2.1 (1.03 – 4.3)	0.04	2.0 (0.9 – 4.2)	0.06
Number of Pregnancies				
0	1.6 (0.8 – 3.2)	0.2	2.2 (1.3 – 3.7)	0.005
1 – 3	1.6 (0.9 – 2.7)	0.1	1.4 (0.7 – 2.6)	0.3
≥ 4	Ref		Ref	

*Estimates derived from logistic generalized estimating equations, accounting for clustering at the village level.

Bivariate associations with reproductive coercion

Among those who reported reproductive coercion, 27.9% also reported lifetime IPV, compared to 9% who did not experience such victimization ($p<0.0001$). In the unadjusted GEE odds ratio estimates, women who reported lifetime IPV were 3.8 times more likely to report reproductive coercion than those who did not report such violence (95%CI: 2.4 – 6.0) (Table 3). In the unadjusted analyses, lowered odds of reproductive coercion were associated with older age (OR: 0.97; 95%CI: 0.95 - 0.99) and Christian religion (OR: 0.4; 95%CI: 0.2 – 0.9). Heightened odds of reproductive coercion were associated with primary (OR: 2.2; 95%CI: 1.7 – 2.8) or secondary school (OR: 1.7; 95%CI: 1.1 – 2.7), living with a partner, but not married (OR: 2.4; 95%CI: 1.3 – 4.4) and partnered, but not living together or married (OR: 2.1; 95%CI: 1.03 – 4.3). No other demographic factors were associated significantly with reproductive coercion.

Adjusted associations with reproductive coercion

In the final adjusted analyses, lifetime IPV was associated with a 3.7 increase in odds of reporting reproductive coercion (95% CI: 2.4 – 5.8) compared to women who did not report such victimization, adjusting for covariates and correlation at the village level (Table 3). Older age and not attending formal school were associated with reduced odds of reporting reproductive coercion. Women who had never been pregnant were 2.2 times more likely to report reproductive coercion (95%; CI: 1.3 – 3.7) compared to women who had four or more pregnancies. Compared to Yacouba women, Dioula women were 2.6 times more likely to report reproductive coercion (95%CI: 1.1 – 6.0). Muslim women were less likely to report reproductive coercion compared to Christian women (aOR: 0.3; 95%CI: 0.1 – 0.6). In the final model, living with a partner, but not married (aOR: 2.2; 95%CI: 1.3- 3.7) and partnered, but not married or living together (aOR: 2.0; 95%CI: 0.9-4.2) were not associated with reproductive coercion.

Discussion

Half (49.8%) of rural Ivorian women in the community-based sample reported experiencing physical and/or sexual IPV from a male partner at some point in their lifetime, demonstrating that IPV is commonplace in this region, regardless of marital status. This high prevalence of IPV is comparable to the range suggested in the small amount of IPV estimates in Côte d'Ivoire[15,24], and is comparable within the range of the few IPV estimates that have been conducted among conflict-affected nations in West Africa[25-27].

The current study also documents a significant relationship between IPV and reported experiences of partner perpetrated reproductive coercion. Specifically, women with experiences of IPV were more than three times more likely to report reproductive coercion than their counterparts who did not report IPV. Findings from the present investigation are consistent with US-based work that is one of the few existing investigations that has explicitly examined the link between IPV and partner perpetrated reproductive coercion[12-14]. These findings also parallel prior work documenting women's experiences of IPV and decreased reproductive autonomy[28,29], and underscore the reproductive health threats faced by women in Côte d'Ivoire due to violence from their partners. Moreover, prior work in Côte d'Ivoire has demonstrated an association between abuse from in-laws (i.e. family members of male partners), and in-law perpetrated reproductive coercion[19]. The current investigation documents that reproductive coercion is also more likely to be exacted by male partners in the context of IPV in this West African nation. Together, these studies call for the importance of reducing IPV both to improve the well-being of women, but also to improve the reproductive health, and potential mental health[30] of Ivorian women.

Notable differences in IPV experiences based on ethnicity were observed. In this sample of Ivorian women, a higher prevalence of IPV was observed among women who identified as Yacouba, Guere, or Dioula. More research is needed to understand these findings, and may provide important information for the development

of culturally tailored programs for these particular ethnicities. For instance, many of these groups are of ethnic minority status in Côte d'Ivoire, and thus have a long history of experiences of discrimination as well as ethnically-motivated violence. Both of these exposures have been associated with increased IPV in other contexts [31-35] and thus the trauma, along with the loss of economic livelihood, as well as pervasive gender norms disfavoring women may all need to be addressed in these populations to reduce IPV.

Inconsistent with prior research[36] no significant differences were observed regarding number of pregnancies and IPV experiences. However, consistent with the aforementioned study in Côte d'Ivoire examining in-law abuse and in-law perpetrated reproduction coercion, women who reported zero pregnancies were over twice as likely to experience reproductive coercion than women with 4 or more pregnancies[19]. While more research is needed to understand this observation, culturally prescribed gender norms may be driving this as prior work across multiple global contexts have documented the social pressure faced by women from both partners and partners' family to produce children both to preserve status within the community and viewing women as responsible for miscarriage and/or inability to conceive[37-39]. It has been recommended to encourage women to utilize discreet forms of contraception (i.e. injectables) as an effective means to reduce unwanted pregnancy and avoid conflict with husbands/partners regarding the use of contraception[10]. Such longer term methods have also been recommended for disaster-affected populations to ensure protection from unwanted pregnancy in crisis situations where it may be difficult to adhere to regimens[40]. However, current observations suggest the need for research on how discreet methods may protect women from coercion and maltreatment in the long term, particularly in societies where childless women are less valued[39], thus underscoring the importance of simultaneously addressing cultural norms regarding gender and women's status in this community.

The findings of this study are best considered with the acknowledgment of important limitations. Firstly, temporality cannot be ascertained due to the cross-sectional design. Additionally, the findings of this study are best applied to women whose demographics are represented herein; the sample was not drawn from a probability based-sample and women in the current study had to meet strict inclusion criteria. Lastly, as with most research on IPV, both IPV and reproductive coercion may be underreported, due to stigma. In addition, this study was not able to examine the differential impacts of IPV and reproductive coercion on reproductive health outcomes, such as unintended pregnancies, which is an opportunity for future research.

Despite these limitations, the present study does have important implications for programming. Current data highlight the importance of integrating IPV reduction efforts into existing reproductive health services in Côte d'Ivoire and potentially other populations in West Africa that are affected by conflict. This may include health care provider-delivered interventions that are designed to screen and assist women with IPV experiences. In Côte d'Ivoire and other settings affected by conflict, services for violence against women, including clinic or health care provider-based interventions, increasing efforts have been recommended to address war-related sexual violence against women (i.e., sexual violence that was perpetrated by armed actors) in clinic-based settings[41,42]. Data from the present study indicate the importance of also addressing comprehensive IPV screening and assistance protocols as part of such programming, including the distinct features of IPV, such as its chronic nature as well as the perpetrator being someone whom the woman may be dependent upon economically that warrant safety planning and harm reduction as part of health care provider-delivered counseling[43]. The integration of IPV reduction efforts into community-based reproductive health programming is also indicated, which may include providing education to providers as well as community members regarding the links between IPV and reproductive health.

Within humanitarian programming, provision of and access to family planning has been highlighted as a key component of sexual and reproductive health programs[44,45]. These recommendations resonate with the recent multi-

organization movement to commit to increasing family planning utilization[18]. Indeed, it is critically important to provide reproductive health and family planning services to conflict-affected settings, such as in rural Côte d'Ivoire[46] and to address traditional barriers including lack of information as well as improvement of health systems[47,48]. However, such programs must also work to improve the reproductive autonomy of women, as well as the larger social and gender norms that may prevent women from utilizing such contraception and simultaneously perpetuate IPV, which may be particularly relevant for countries in the post-conflict period or among populations affected by protracted crises. Additionally, future work is needed to assess how community-based socioeconomic empowerment interventions aimed to reduce IPV might impact the forms of reproductive coercion assessed in this present investigation. The reduction of IPV and associated reproductive coercion of women has enormous potential to improve the overall reproductive health of women in this West African country.

Acknowledgements

Study funding was provided by the World Bank's State and Peace-building Fund (SPF) [contract number 7156602], The World Bank Group (PI: J Gupta). This work was supported, in part, by Yale University's Center for Interdisciplinary Research on AIDS (CIRA), through grants from the National Institute of Mental Health, Paul Cleary, Ph.D., Principal Investigator (P30MH062294). The views presented are those of the authors and do not necessarily represent the views of the World Bank, NIMH, NIH, or IRC. Study sponsors had no role in the planning of the study or in writing/approving the manuscript.

Contribution of Authors

KLF led the conceptualization and writing and led the analyses. JA assisted with writing and is co-principal investigator of the study from which these data were obtained. DK oversaw field activities and assisted with analyses. JG assisted in conceptualization and writing and is principal investigator of the study from which these data were obtained.

References

1. Garcia-Moreno C, Jansen HA, Ellsberg M, et al. Prevalence of intimate partner violence: findings from the WHO multi-country study on women's health and domestic violence. Lancet 2006;368(9543):1260-9.
2. Silverman JG, Gupta J, Decker MR, et al. Intimate partner violence and unwanted pregnancy, miscarriage, induced abortion, and stillbirth among a national sample of Bangladeshi women. BJOG 2007; 114:1246-52.
3. Campbell JC. The health consequences of intimate partner violence. Lancet 2002;359:1331-6.
4. Campbell JC, Baty ML, Ghandour RM, et al. The intersection of intimate partner violence against women and HIV/AIDS: a review. Int J Contr Saf Promot 2008;15(4):221-31.
5. Chambliss LR. Intimate partner violence and its implication for pregnancy. Clin Obstet Gynecol 2008;51(2):385-97.
6. Sarkar NN. The impact of intimate partner violence on women's reproductive health and pregnancy outcome. J Obstet Gynaecol 2008;28(3):266-71.
7. Okenwa L, Lawoko S, Jansson B. Contraception, reproductive health and pregnancy outcomes among women exposed to intimate partner violence in Nigeria. The European journal of contraception & reproductive health care : the official journal of the European Society of Contraception 2011;16(1):18-25.
8. Stockl H, Filippi V, Watts C, et al. Induced abortion, pregnancy loss and intimate partner violence in Tanzania: a population based study. BMC pregnancy and childbirth 2012;12:12.
9. Watts C, Mayhew S. Reproductive health services and intimate partner violence: shaping a pragmatic response in Sub-Saharan Africa. Int Fam Plan Perspect 2004;30(4):207-13.
10. Miller E, Silverman JG. Reproductive coercion and partner violence: implications for clinical assessment of unintended pregnancy. Expert Rev Obstet Gynecol 2010;5(5):511-5.
11. Miller E, Jordan B, Levenson R, et al. Reproductive coercion: connecting the dots between partner violence and unintended pregnancy. Contraception 2010;81(6):457-9.
12. Miller E, Decker MR, McCauley HL, et al. Pregnancy coercion, intimate partner violence and unintended pregnancy. Contraception 2010;81(4):316-22.
13. Miller E, McCauley HL, Tancredi DJ, et al. Recent reproductive coercion and unintended pregnancy among female family planning clients. Contraception 2014;89(2):122-8.
14. Clark LE, Allen RH, Goyal V, et al. Reproductive coercion and co-occurring intimate partner violence in obstetrcis and gynecology patients. Am J Obstet Gynecol 2014;210(1):e1-8.

15. Hossain M, Zimmerman C, Kiss L, et al. Violence against women and men in Cote d'Ivoire: a cluster randomized controlled trial to assess the impact of the 'Men and Women in Partnership' intervention on the reduction of violence against women and girls in rural Cote d'Ivoire - results from a community survey. London, UK: London School of Hygiene and Tropical Medicine (LSHTM), 2010.
16. World Bank. Reproductive health at a glance: Cote d'Ivoire. Washington, DC: World Bank, 2011.
17. WHO, UNICEF, UNFPA, et al. Trends in maternal mortality: 1990-2010. Geneva: WHO, 2012.
18. UKAID, Bill and Melinda Gates Foundation. The London Summitt on Family Planning, 2012.
19. Gupta J, Falb KL, Kpebo D, et al. Abuse from in-laws and associations with attempts to control reproductive decisions among rural women in Cote d'Ivoire: a cross-sectional study. BJOG 2012;119(9):1058-66.
20. Chan KL, Tiwari A, Fong DY, et al. Correlates of in-law conflict and intimate partner violence against Chinese pregnant women in Hong Kong. J Interpers Violence 2009;24(1):97-110.
21. Raj A, Livramento KN, Santana MC, et al. Victims of intimate partner violence more likely to report abuse from in-laws. Violence against Women 2006;12(10):936-49.
22. Raj A, Sabarwal S, Decker MR, et al. Abuse from in-laws during pregnancy and post-partum: qualitative and quantiative findings from low-income mothers of infants in Mumbai, India. Maternal and Child Health 2010;15(6):700-12.
23. Gupta J, Falb KL, Lehmann H, et al. Gender norms and economic empowerment intervention to reduce intimate partner violence against women in rural Cote d'Ivoire: a randomized controlled pilot study. BMC Int Health Hum Rights 2013;13:46.
24. UNICEF. West and Central Africa: Cote d'Ivoire, 2011.
25. Coker AL, Richter DL. Violence against women in Sierra Leone: frequency and correlates of intimate partner violence and forced sexual intercourse. Afr J Reprod Health 1998;2(1):61-72.
26. Allen M, Devitt C. Intimate partner violence and belief systems in Liberia. J Interpers Violence 2012;27(17):3514-31.
27. Salihu H, August E, Salemi J, et al. The association between female genital mutilation and intimate partner violence. BJOG 2012;epub ahead of print.
28. Hathaway JE, Willis G, Zimmer B, et al. Impact of partner abuse on women's reproductive lives. J Am Med Womens Assoc 2005;60(1):42-5.
29. Pallitto CC, Campbell JC, O'Campo P. Is intimate partner violence associated with unintended pregnancy? a review of the literature. Trauma Violence Abuse 2005;6(3):217-35.
30. McCauley H, Falb KL, Streich-Tilles T, et al. Mental health impacts of reproductive coercion among women in Cote d'Ivoire. IJGO 2014;127(1):55-9.
31. Annan J, Brier M. The risk of return: intimate partner violence in Northern Uganda's armed conflict. Soc Sci Med 2010;70:152-9.
32. Clark CJ, Everson-Rose SA, Suglia SF, et al. Association between exposure to political violence and intimate-partner violence in the occupied Palestinian territory: a cross-sectional study. Lancet 2010;375:310-6.
33. Falb KL, McCormick MC, Hemenway D, et al. Violence against refugee women along the Thai-Burma border. Int J Gynaecol Obstet 2013;epub ahead of print.
34. Gupta J, Acevedo-Garcia D, Hemenway D, et al. Premigration exposure to political violence and perpetration of intimate partner violence among immigrant men in Boston. AJPH 2009;99(3):462-9.
35. Gupta J, Reed E, Kelly J, et al. Men's exposure to human rights violations and relations with perpetration of intimate partner violence in South Africa. JECH 2010.
36. Raj A, Santana MC, La Marche A, et al. Perpetration of intimate partner violence associated with sexual risk behaviors among young adult men. AJPH 2006;96(10):1873-8.
37. Fledderjohann JJ. 'Zero is not good for me': implications of infertility in Ghana. Hum Reprod 2012;27(5):1383-90.
38. Dyer SJ, Abrahams N, Hoffman M, et al. 'Men leave me as I cannot have children': women's experiences with involuntary childlessness. Hum Reprod 2002;17(6):1663-8.
39. Inhorn MC. Right to assisted reproductive technology: overcoming infertility in low-resource countries. IJGO 2009;106(2):172-4.
40. Nour NN. Maternal health considerations during disaster relief. Rev Obstet Gynecol 2011;4(1):22-7.
41. Inter-Agency Standing Committee. Guidelines for gender-based violence interventions in humanitarian settings: focusing on prevention of and response to sexual violence in emergencies, 2005.
42. Shanks L, Schull MJ. Rape in war: the humanitarian response. CMAJ 2000;163(9):1152-6.
43. International Rescue Committee. Let me not die before my time: domestic violence in West Africa. New York, NY: IRC, 2012.
44. Inter-Agency Working Group on Reproductive Health in Crises. A statement on family planning for women and girls as a life-saving intervention in humanitarian settings: IAWG, 2010.
45. Inter-Agency Working Group on Reproductive Health in Crises. Minimum Initial Service Package (MISP) for reproductive health in crisis situations. Secondary Minimum Initial Service Package (MISP) for reproductive health in crisis situations 2011. http://misp.rhrc.org/.
46. Inter-Agency Working Group on Reproductive Health in Crises. An open letter to organizers of the London Summit on Family Planning. Secondary An open letter to organizers of the London Summit on Family Planning 2012. http://www.iawg.net/IAWG%20Open%20Letter_FP%20Summit%20FINAL.pdf.
47. McGinn T, Austin J, Anfinson K, et al. Family planning in conflict: results of cross-sectional baseline surveys in three African countries. Conflict and Health 2011;5(11):epub ahead of print.

48. UNHCR, Women's Refugee Commission. Refocusing family planning in refugee settings: findings and recommendations from a multi-country baseline study. New York: Women's Refugee Commission, 2011.