Intimate Partner Violence and Women's Health and Empowerment among Menstrual Regulation and Postabortion Care Clients in Bangladesh

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Abstract

Intimate partner violence (IPV) negatively impacts women's health and well-being. An estimated 50-60% of Bangladeshi women have ever experienced physical and/or sexual intimate partner violence, and 30% have experienced such violence in the past year. The present study assesses the association between experience of past year IPV and reproductive health and empowerment outcomes among a facility-based sample of 458 uterine evacuation clients in Bangladesh. Over 25% of women in the sample experienced past year IPV. IPV was associated with a higher odds of care for complications of illegal abortion (AOR=2.08) and of seeking medication abortion (AOR=2.17), which can be used covertly. IPV was also associated with religious and family opposition to family planning use (AOR=2.38 and AOR=5.72, respectively), and lack of women's involvement in decision-making regarding her health care. IPV was common in this sample, and was associated with constrained access to family planning including legal abortion.

Extended abstract

Background

Intimate partner violence (IPV) negatively impacts women's health and well-being and is a major contributor to poor reproductive health outcomes (World Health Organization et al., 2013; Silverman and Raj, 2014). Globally, one in three women experiences physical or sexual IPV during her lifetime (World Health Organization et al., 2013). In Bangladesh, the rates are higher; an estimated 50-60% of Bangladeshi women have experienced physical and/or sexual intimate partner violence in their lifetimes, and 30% have experienced such violence in the past year (Garcia-Moreno et al., 2006). Recent studies in Bangladesh have demonstrated that IPV experience is associated with a 50-60% increase in unwanted pregnancy and over two times higher odds of abortion (AOR=2.60) (Silverman et al., 2007; Pallitto et al., 2013). In addition, women in Bangladesh experience gender-based inequality in reproductive health, empowerment and economic activity (United Nations Development Program, 2013). The 2012 Gender Inequality Index (GII) shows that Bangladesh ranks 111 out of 148 countries with a GII value of 0.518 (United Nations Development Program, 2013).

Although the law in Bangladesh restricts abortion except to save the life of a woman, since 1979 menstrual regulation (MR) has been allowed to induce menstruation and thus to establish non-pregnancy up to 10 weeks from the beginning of the last menstrual period (Bart Johnston et al., 2010). Despite availability of MR services, unsafe induced abortion still occurs in Bangladesh due to economic, cultural and informational barriers limiting women's access to safe MR services, as well as some gaps in quality of care (Singh et al., 1997; Bart Johnston et al., 2010). In 2010, the annual induced abortion rate, including safe and unsafe illegal abortions, was 18.2 per 1,000 women of reproductive age, and the annual MR rate was 18.3 per 1,000 women (Singh et al., 2012). That these two rates are equivalent indicates that many women with unwanted pregnancies are not utilizing MR services, and as a result, they are resorting to illegal and often unsafe abortions (Singh et al., 2012). Post-abortion care (PAC) to treat complications of unsafe abortion is offered in public health facilities to meet the needs of these women. In addition, it is recommended that contraception is offered to women who receive MR and PAC services at the time of their procedures as an effective way of reducing subsequent unwanted pregnancy and abortion (World Health Organization, 2012).

The present study seeks to understand the association between experience of past year IPV and reproductive health and empowerment outcomes among a facility-based sample of MR and PAC clients in Bangladesh.

Methodology

This cross-sectional study enrolled a facility-based sample of 498 MR or PAC clients aged 18-49 years. Women completed an interviewer-administered survey at the health facility on the day of their uterine evacuation (UE) procedures. Interviews were conducted in Bangla and lasted 30-45 minutes. Questionnaires were developed in English and translated to Bangla. The questionnaires were back-translated and pilot-tested, and adjustments were made as necessary. Data collection occurred from March-June 2013; the response rate was 89%.

Sample

This study used a facility-based sample drawn from among the pool of government and NGO facilities where Ipas has trained a provider in UE service provision and upgraded the site to ensure that appropriate equipment and infection prevention materials are available. The Ipas Bangladesh country office maintains a full list of facilities where Ipas works, and this served as the sampling frame for the study. The sampling frame consisted of 47 facilities (18 primary, 16 secondary, 5 tertiary, and 8 NGO facilities), and 16 were randomly selected for inclusion in this study. There are 5,301 public sector

facilities in Bangladesh where UE services are provided (Vlassoff et al., 2012). Compared to the broader group of facilities where UE services are provided, facilities where Ipas works are more likely to be in urban settings such as Dhaka and Chittagong. Selecting facilities for this study from the pool of facilities where Ipas works ensured that the women included in the study received a similar quality of care in UE service and post-abortion contraceptive provision.

A stratified one-stage cluster sampling approach was used to select women for the study. Inclusion criteria for facilities included provision of MR or PAC services and provision of pills, injectables, or condoms as post-abortion contraceptive methods. Facilities were stratified by type: primary, secondary, tertiary, and NGO facilities (RHSTEP clinics). A stratified approach was used to ensure representation from all facility types, as these facilities are thought to serve different populations of women. Facilities were randomly selected using probability proportional to size (PPS) sampling within facility type strata. Between facility type strata there was an equal allocation of selected facilities.

Within selected facilities, all women receiving MR or PAC services were screened for study eligibility. Inclusion criteria for study participation included: 18-49 years of age; received MR or PAC services using any procedure; and accepted pills, injectables, or condoms as a post-abortion contraceptive method, or selected no method. Women who selected a long-term post-abortion contraceptive method were ineligible for participation.

Measures

Outcome measures assessed in this study included reproductive health and women's empowerment. Four uterine evacuation characteristics were assessed: type of treatment received (MR, PAC for abortion attempt, or PAC for miscarriage), procedure type (manual vacuum aspiration (MVA), medication abortion (MA), or dilatation and curettage (D&C)), post-abortion contraceptive acceptance, and the short-term post-abortion contraceptive method selected (oral contraceptive pills, condoms, or injectables). We also assessed fertility intentions regarding the terminated pregnancy. First, women were asked, "At the time you became pregnant, did you want to become pregnant then, did you want to wait until later, did you not want to have any (more) children, or did you not think about it?". Second, women were shown a scale on a card and asked, "Please look at the scale on the card. On this scale, a 1 means that you did not want to avoid pregnancy, and 10 means you wanted very much to avoid pregnancy. Which number on the card best describes how much you wanted to avoid pregnancy at the time you became pregnant?" (Centers for Disease Control, 2008). This was used as an avoidance score for the terminated pregnancy on a scale of 1-10, with a higher score indicating stronger pregnancy avoidance. Women were also asked whether they wanted a/another child in the future, and were asked the same question about their husband's preferences. Access to family planning was assessed through a series of yes/no questions regarding the expense and difficulty of obtaining family planning methods as well as opposition to her family planning use. Finally, empowerment was assessed through a series of household decision-making questions, and these were dichotomized to indicate whether or not she was involved in each type of decision-making.

The measure for intimate partner violence included experience of either physical or sexual violence perpetrated by the woman's husband or sexual partner in the past year. Violence experience was assessed using the standard questions from the 2007 Bangladesh DHS, which are based on the validated conflict tactics scales (CTS2). Women were asked, "In the past year has your husband/partner hit, kicked, slapped or otherwise physically hurt you?" and "In the past year, has your husband/partner physically forced you to have sexual intercourse with him even when you did not want to?" (NIPORT et al., 2009). If a woman answered yes to either of these questions, she was coded as having experienced IPV. Interviewers were prompted to confirm privacy before proceeding to the questions regarding violence experience. If privacy could not be assured, these questions were skipped. A total of 498 women were enrolled in the study, but the analytic sample was restricted to the 458 women who answered the two questions regarding IPV.

Analyses

Socio-demographic characteristics are presented for the sample as a whole and by IPV experience. To test bivariate associations between socio-demographic characteristics and IPV experience, chi-square tests were used for categorical variables and t-tests were used for continuous variables. Significance was assessed at an alpha of 0.05 for all analyses.

Logistic and multinomial logistic regression models were used to test the association between experience of intimate partner violence and women's health and empowerment outcomes. Odds ratios are reported for logistic regression results, and relative rate ratios are reported for multinomial logistic regression results. All models adjusted for age, education, parity, family composition (whether or not the woman has a son), household type, urban or rural residence, migrant status, husband's place of residence (at home or elsewhere), husband's age, and husband's education. Analyses were conducted using Stata/SE 12.1, and clustered standard errors were used to account for non-independence of respondents within facilities.

Results

In this sample, women were an average of 27 years old, with two children, half had secondary or higher education, most were Muslim, and almost all were married (Table 1). Over half of the sample resided in urban areas, and one quarter were rural to urban migrants. Almost 10% of the women in the sample had a husband who was living away from home at the time of the interview. One quarter of the sample experienced IPV in the past year. There were no differences in socio-demographic characteristics by violence experience except for characteristics of women's residence. Women living in urban areas and those who were rural to urban migrants were more likely to have experienced IPV in the past year. Over 30% of women living in urban areas experienced recent IPV compared to 19% in rural areas ($p<0.01$), and a similar pattern was observed for rural to urban migrants compared to women who were not migrants or who migrated from urban to rural areas. In addition, among women whose husbands lived away, 43% experienced recent IPV, compared to 24% of women whose husbands lived with them ($p=0.011$).

IPV experience was associated with multiple health and empowerment outcomes (Table 2). Women who experienced IPV had two times higher odds of seeking care for complications of an illegal abortion attempt, compared to seeking care for MR (95% CI: 1.06 – 4.10) and had two times higher odds of using medication abortion (MA) compared to manual vacuum aspiration (MVA) (95% CI: 1.25 – 3.77). Those who experienced violence also had 40% lower odds of accepting a post-abortion contraceptive method (95% CI: 0.38 – 0.92). Women who experienced violence also had 2.5 times higher odds of reporting that they did not think about the timing of the terminated pregnancy, compared to wanting the pregnancy later or not at all (95% CI: 1.09 – 5.80). Women who experienced IPV also had three times higher odds of reporting future fertility intentions that were discordant with their partner's intentions (95% CI 1.38 – 6.53). Experience of IPV was also associated with women's access to family planning and decision-making within the family. Women who experienced violence had two times higher odds of reporting that family planning is too inconvenient to use (1.10 – 5.15). IPV was also associated with opposition to family planning use. Women who experienced IPV had almost six times higher odds of reporting that their in-laws were opposed to family planning use (95% CI: 1.49 – 21.91), and more than two times higher odds of reporting that their religion prohibits family planning use (95% CI: 1.59 – 3.55). In addition, women who experienced IPV had 50% lower odds of being involved in decision-making for their healthcare.

Discussion

One quarter of women in the sample reported IPV in the past year, which in turn was associated with accessing care for complications resulting from an illegal abortion attempt compared to care for legal

menstrual regulation. Findings suggest that women who experience violence are more likely to access abortion care outside of the health system, though this study cannot ascertain the safety or quality of that care. Women seeking care for complications of abortion could range from those who have attempted to self-induce using herbs or instruments, to those who access misoprostol through pharmacies and present at the facility to ensure that the abortion is complete. We also find that women who experience violence are more likely to select medication abortion (MA) compared to manual vacuum aspiration (MVA), which suggests that women who experience violence seek abortion methods that could be considered covert. There is some qualitative evidence that women who experience violence select MA in order to appear as if she is having a miscarriage in order to hide MR from her family (Marlow et al., forthcoming).

Our findings also suggest that IPV is associated with a lack of control over fertility, and impeded access to family planning. Higher odds of discordance in fertility intentions between partners and opposition to family planning use by in-laws suggests that women who experience violence have less control over their fertility, especially in a patriarchal setting such as Bangladesh where husbands and in-laws are important gatekeepers. Greater ambivalence about pregnancy among women who experience violence, could indicate this lack of control or perceived control over fertility. In addition, women who experienced violence were more likely to report that their religion prohibits family planning use, which could indicate higher rates of violence among those who are more conservative Muslims. Finally, women who experienced violence had 50% lower odds of being involved in decision-making for their healthcare, which suggests that they are disempowered within the family system. Taken together, these findings suggest that MR and PAC clients who experience IPV lack access to safe, legal abortion and family planning services.

References

Bart Johnston, H., Oliveras, E., Akhter, S., Walker, D.G. (2010). Health system costs of menstrual regulation and care for abortion complications in Bangladesh. *International Perspectives on Sexual and Reproductive Health*, 36(4), 197-204.

Centers for Disease Control (CDC). (2008). National Survey for Family Growth (NSFG) 2006-2010, Female Questionnaire. Accessed online September 16, 2013, at http://www.cdc.gov/nchs/data/nsfg/NSFG_2006-2010_Y3_FemaleE_CRQ.pdf

Garcia-Moreno, C., Jansen, H.A.F.M., Ellsberg, M., Heise, L., Watts, C.H. (2006). Prevalence of intimate partner violence: Findings from the WHO multi-country study on women's health and domestic violence. *Lancet*, 368, 1260-1269.

Marlow, H., Biswas, K., Griffin, R., Menzel, J. (Under review). Women's experiences with menstrual regulation with medication in Bangladesh.

Pallitto, C.C., Garcia-Moreno, C., Jansen, H.A.F.M., Heise, L., Ellsberg, M., Watts, C.H. (2013). Intimate partner violence, abortion, and unintended pregnancy: Results from the WHO multi-country study on women's health and domestic violence. *International Journal of Gynecology and Obstetrics*, 120, 3-9.

Silverman, J.G., Gupta, J., Decker, M.R., Kapur, N., Raj, A. (2007). Intimate partner violence and unwanted pregnancy, miscarriage, induced abortion, and stillbirth among a national sample of Bangladeshi women. *BJOG*, 114, 1246–1252.

Silverman, J.G., Raj, A. (2014). Intimate Partner Violence and Reproductive Coercion: Global Barriers to Women's Reproductive Control. *PLoS Med* 11(9), e1001723.

Singh, S., Cabigon, J.V., Hossain, A., Kamal, H., Perez, A.E. (1997). Estimating the Level of Abortion in the Philippines and Bangladesh. *International Family Planning Perspectives*; 23 (3): 100-144.

Singh, S., Hossain, A., Maddow-Zimet, I., Bhuiyan, U., Vlassoff, M., Hussain, R. (2012). The incidence of menstrual regulation procedures and abortion in Bangladesh, 2010. *International Perspectives on Sexual and Reproductive Health*, 38(3), 122-132.

United Nations Development Program (UNDP). (2013). Human Development Report 2013: Bangladesh Country Profile. Accessed online September 26, 2014, at http://hdr.undp.org/sites/default/files/Country-Profiles/BGD.pdf

Vlassoff, M., Hossain, A., Maddow-Zimet, I., Singh, S., Bhuiyan, H.U. (2012). *Menstrual regulation and postabortion care in Bangladesh: Factors associated with access to and quality of services*. New York: Guttmacher Institute.

World Health Organization (WHO). (2012). *Safe abortion: Technical and policy guidance for health systems*. Second ed. Malta: WHO.

World Health Organization (WHO), London School of Hygiene and Tropical Medicine, South African Medical Research Council. (2013). *Global and regional estimates of violence against women: Prevalence and health effects of intimate partner violence and non-partner sexual violence*. Geneva: WHO.

Table 1. Characteristics of study sample by past year experience of intimate partner violence (n=458)

	Total (n=458)		IPV (n=118)		No IPV (n=340)		
Socio-demographic Characteristics	**n**	**(%)**	**n**	**(%)[a]**	**n**	**(%)[a]**	**p-value**
Mean age	27.3		27.8		27.1		0.300
(SD)	(6.11)		(6.04)		(6.13)		
Husband's mean age	34.8		35.1		34.7		0.670
(SD)	(7.82)		(7.56)		(7.91)		
Education							0.095
None	66	(14.4)	19	(28.8)	47	(71.2)	
Primary	140	(30.6)	44	(31.4)	96	(68.6)	
Secondary or higher	252	(55.0)	55	(21.8)	197	(78.2)	
Husband's education							0.377
None	79	(17.3)	24	(30.4)	55	(69.6)	
Primary	131	(28.7)	36	(27.5)	95	(72.5)	
Secondary or higher	246	(54.0)	57	(23.2)	189	(76.8)	
Religion							0.840
Islam	407	(88.7)	105	(25.8)	302	(74.2)	
Hinduism	50	(10.9)	13	(26.0)	37	(74.0)	
Other	1	(0.2)	0	(0)	1	(100)	
Marital status							0.089
Married	457	(99.8)	117	(25.6)	340	(74.4)	
Formerly married	1	(0.2)	1	(100)	0	(0)	
Mean parity	1.8		1.8		1.8		0.796
(SD)	(1.41)		(1.38)		(1.42)		
Family composition							0.626
Have at least one son	258	(61.6)	68	(26.4)	190	(73.6)	
Have no sons	161	(38.4)	39	(24.2)	122	(75.8)	
Household structure							0.582
Nuclear	254	(55.5)	68	(26.8)	186	(73.2)	
Extended	204	(44.5)	50	(24.5)	154	(75.5)	
Husband's residence							0.011
Husband living with her	421	(91.9)	102	(24.2)	319	(75.8)	
Husband living away	37	(8.1)	16	(43.2)	21	(56.8)	
Residence							0.006
Urban	269	(58.7)	82	(30.5)	187	(69.5)	
Rural	189	(41.3)	36	(19.0)	153	(81.0)	
Migrant status							0.006
Rural to urban migrant	116	(25.3)	41	(35.3)	75	(64.7)	
No migration or urban to rural migrant	342	(74.7)	77	(22.5)	265	(77.5)	

[a] Row percentages are reported

Table 2. Logistic and multinomial logistic regression results of past year experience of intimate partner violence and uterine evacuation, fertility intention, family planning access and empowerment outcomes (n=458)

	Total (n=458)		Past Year IPV				
Outcome	**n**	**(%)**	**n**	**(%)[b]**	**AOR**		**(95% CI)**
Uterine Evacuation Characteristics							
Type of treatment received[a]							
Menstrual regulation (MR) (ref)	270	(59.0)	61	(51.7)	1.00		
Postabortion care (PAC) for abortion	74	(16.2)	31	(26.3)	2.08	*	(1.06 - 4.10)
Postabortion care (PAC) for miscarriage	114	(24.9)	26	(22.0)	1.01		(0.43 - 2.37)
Uterine evacuation procedure type[a]							
Manual vacuum aspiration (MVA) (ref)	333	(74.0)	78	(68.4)	1.00		
Medication abortion (MA)	35	(7.8)	15	(13.2)	2.17	*	(1.25 - 3.77)
Dilatation and curettage (D&C)	82	(18.2)	21	(18.4)	0.97		(0.54 - 1.75)
Accepted post-abortion contraception	330	(72.2)	71	(60.2)	0.59	*	(0.38 - 0.92)
Post-abortion contraceptive method selected							
Oral contraceptive pills (ref)	201	(60.9)	38	(53.5)	1.00		
Condoms	50	(15.2)	12	(16.9)	1.40		(0.70 - 2.80)
Injectables	79	(23.9)	21	(29.6)	1.45		(0.90 - 2.34)
Fertility Intentions							
Family planning use before terminated pregnancy	235	(58.9)	57	(48.3)	0.87		(0.50 - 1.53)
Timing of terminated pregnancy[a]							
Wanted pregnancy later or not at all (ref)	336	(73.4)	78	(66.1)	1.00		
Wanted pregnancy then	76	(16.6)	19	(16.1)	1.10		(0.43 - 2.80)
Did not think about timing of pregnancy	46	(10.0)	21	(17.8)	2.51	*	(1.09 - 5.80)
Future fertility intentions							
Want no (more) children (ref)	214	(46.7)	63	(53.4)	1.00		
Want a/another child or don't know	244	(53.3)	55	(46.6)	0.60		(0.32 - 1.14)
Husband's future fertility intentions							
Want no (more) children (ref)	189	(41.6)	49	(43.0)	1.00		
Want a/another child or don't know	265	(58.4)	65	(57.0)	1.12		(0.56 - 2.23)
Couple future fertility intentions							
Concordant intentions (ref)	426	(93.8)	101	(88.6)	1.00		
Discordant intentions	28	(6.2)	13	(11.4)	3.01	*	(1.38 - 6.53)
Access to Family Planning							
Expense of family planning							
Not too expensive (ref)	384	(88.1)	93	(80.2)	1.00		
Family planning is too expensive	52	(11.9)	23	(19.8)	3.03		(0.95 - 9.64)
Difficulty obtaining family planning							
No difficulty (ref)	401	(90.1)	99	(85.3)	1.00		
Family planning is too difficult to obtain	44	(9.9)	17	(14.7)	1.74		(0.89 - 3.37)
Inconvenience of family planning							

Not inconvenient (ref)	333	(78.9)	76	(68.5)	1.00		
Family planning is inconvenient to use	89	(21.1)	35	(31.5)	2.38	*	(1.10 - 5.15)
Husband opposes family planning use							
No (ref)	422	(95.9)	103	(93.6)	1.00		
Yes	18	(4.1)	7	(6.4)	2.17		(0.71 - 6.67)
In-laws oppose family planning use							
No (ref)	293	(92.1)	65	(83.3)	1.00		
Yes	25	(7.9)	13	(16.7)	5.72	*	(1.49 - 21.91)
Religion prohibits family planning use							
No (ref)	319	(76.1)	74	(66.7)	1.00		
Yes	100	(23.9)	37	(33.3)	2.38	*	(1.59 - 3.55)
Empowerment							
Decision-making for MR							
Not involved in decision-making (ref)	19	(4.2)	8	(6.8)	1.00		
Involved in decision-making	438	(95.8)	110	(93.2)	0.46		(0.17 - 1.25)
Decision-making for family planning use							
Not involved in decision-making (ref)	33	(7.3)	11	(9.5)	1.00		
Involved in decision-making	418	(92.7)	105	(90.5)	0.67		(0.26 - 1.74)
Decision-making for her healthcare							
Not involved in decision-making (ref)	77	(16.8)	25	(21.2)	1.00		
Involved in decision-making	381	(83.2)	93	(78.8)	0.53	*	(0.31 - 0.93)
Decision-making for daily household purchases							
Not involved in decision-making (ref)	165	(36.1)	45	(38.5)	1.00		
Involved in decision-making	292	(63.9)	72	(61.5)	0.71		(0.38 - 1.33)

[a] Multinomial logistic regression models were used, and results presented are relative rate ratios (RRR)

[b] Column percentages are reported

* Indicates significance at $p<0.05$

All models adjust for socio-demographic characteristics, including age, education, parity, family composition, rural or urban residence, household type, migrant status, husband's place of residence, husband's education, and husband's age