

# Intimate partner violence among pregnant women in Uganda

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Intimate partner violence is a public health problem that has adverse maternal and fetal outcomes (Das et al, 2013; Stöckl et al, 2014; Gibbs et al, 2017). Pregnant women may be vulnerable and therefore more likely than non-pregnant women to experience intimate partner violence due to physiological and psychosocial changes that occur during pregnancy that lead, for example, to 'male jealousy or anger directed towards the unborn baby' (Cottrell, 2017: 116). Studies have shown that pregnancy may not protect women from intimate partner violence: instead, intimate partner violence may start or even increase during pregnancy (Cottrell, 2017).

Globally, the World Health Organization (WHO) estimates the prevalence of intimate partner violence to be 30% (WHO et al, 2013), while during pregnancy, intimate partner violence occurs in 19.8% of women (James et al, 2013). In sub-Saharan Africa, intimate partner violence during pregnancy is estimated between 2–57% (Shamu et al, 2011). In Uganda, inconsistent findings exist regarding the prevalence of intimate partner violence during pregnancy. According to the Uganda and Demographic Health Survey (UDHS), the prevalence of physical violence during pregnancy was estimated at 16% (Uganda Bureau of Statistics and ICF International Inc, 2012); however, other studies in Uganda have reported a higher prevalence of intimate partner violence among pregnant women (Devries et al, 2010; Osinde et al, 2011).

The study was conducted in Soroti Regional Referral Hospital in eastern Uganda, which is a post-conflict region (Kinyanda et al, 2016). While intimate partner violence during pregnancy has not been widely determined, higher rates of intimate partner violence have been reported in the region due to exposure to violence and abuse of human rights during the armed conflicts (Kinyanda et al, 2016). The purpose of this study was to determine the prevalence of intimate partner violence and associated factors among pregnant women attending the antenatal clinic at the hospital.

## Methods

### Study design and setting

This was a cross-sectional study with quantitative methods of data collection. Data were collected between April–May 2014 from 180 pregnant women who were attending the antenatal clinic at Soroti Regional Referral Hospital. The hospital is located 320 km north east of the capital, Kampala, and is one

## Abstract

**Background:** Intimate partner violence may be more prevalent during pregnancy as women are more vulnerable.

**Aims:** To determine the prevalence of intimate partner violence and associated factors among pregnant women at Soroti Regional Referral Hospital, Uganda.

**Methods:** A cross-sectional study was conducted among 180 pregnant women. Data were collected using a pre-tested, semi-structured questionnaire. Intimate partner violence was measured using the revised Conflict Tactile Scale 2.

**Findings:** The overall prevalence of intimate partner violence during pregnancy was 27.8%. Household average monthly income, experiences of intimate partner violence before pregnancy and marital conflicts were independently associated with intimate partner violence during pregnancy.

**Conclusions:** Screening should be done during antenatal care among women with low household income, marital conflicts, and history of intimate partner violence before pregnancy to identify and manage cases of intimate partner violence. More research is needed to identify interventions for reduction of intimate partner violence during pregnancy.

**Keywords:** Intimate partner violence, Prevalence, Associated factors, Pregnant women

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of the 13 public regional referral hospitals in the country. The hospital's antenatal clinic runs from Monday–Friday with an average monthly attendance of 750 pregnant women.

### Study population and eligibility criteria

The study included all pregnant women who attended for antenatal care. Pregnant women who were seriously ill were excluded from the study.

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**Table 1. Sociodemographic characteristics**

Variable	Woman (n=180)		Partner (n=180)	
	n	%	n	%
<b>Age</b>				
15–24	82	45.6	30	16.7
25–34	90	50.0	100	55.6
35+	8	4.4	50	27.8
<b>Marital status</b>				
Single	38	21.1		
Married	135	75.0		
Divorced/separated	7	3.9		
<b>Religion</b>				
Christian	162	90	161	89.4
Muslim	18	10	19	10.6
<b>Level of education</b>				
No education	13	7.2	9	5.0
Primary	81	45.0	52	28.9
Secondary	69	38.3	81	45.0
Tertiary	17	9.4	38	21.1
<b>Occupation</b>				
Civil servant	16	8.9	36	20.0
Self-employed	39	21.7	87	48.3
Housekeeper	83	46.1	43	23.9
Unemployed	42	23.3	14	7.8
<b>Average income (UGX)*</b>				
≤100 000	128	71.1	78	43.4
≥100 000	52	28.9	102	56.6

\*£1 = 4793.2 UGX

### Sample size and sampling procedure

The Leslie Kish (1965) formula was used to calculate the sample size of the study. A 13.5% prevalence of intimate partner violence during pregnancy by Devries et al (2010) was used and a sample size of 180 was selected. Systematic random sampling was used in which every 4<sup>th</sup> woman who met the eligibility criteria was recruited into the study.

### Study variables and variable measures

The outcome variable of this study was intimate partner violence during pregnancy. The independent variables adapted from the ecological framework of intimate partner violence included individual, relational, and pregnancy factors (Heise, 1998).

Intimate partner violence was conceptualised as any physical, sexual, or emotional violence by a partner in an intimate relationship (WHO et al, 2013). The Conflict Tactile Scale 2 (CTS2) screening tool was adapted for measuring intimate partner violence among pregnant women (Strauss and Douglas, 2004). Physical violence was defined as an act of pushing, pulling, slapping, twisting the arm or hair, punching, kicking, and beating, choking, burning or attacking the woman with a knife, gun or any other weapon (Strauss and Douglas, 2004). Emotional violence was defined as a husband or partner who

humiliated, insulted, shouted, and or threatened the woman with a knife, gun, or another weapon (Strauss and Douglas, 2004). Sexual violence was defined as an intimate partner who used verbal threats or physically forced the woman into a sexual act, or insisted on sex against woman's will without the use of physical force (Strauss and Douglas, 2004). In this study, intimate partner violence during pregnancy was defined as experiencing at least one of the items in the CTS2 tool while the woman was pregnant (Strauss and Douglas, 2004).

### Data collection procedure and data collection tool

An interviewer-administered, semi-structured questionnaire was used to collect data on sociodemographic, relational and pregnancy-related characteristics of the study participants. The interviews were conducted in a quiet separate room in the antenatal clinic. The revised CTS2 was used to measure intimate partner violence during pregnancy. This tool is an open-access tool and has been reported to be valid and reliable ( $r=0.79-0.87$ ) (Strauss, 2004). The CTS2 tool comprises five components: physical violence, sexual violence, emotional violence, physical injury and negotiation. According to the CTS2 tool, physical injury is a measure of severity of violence, whereas negotiation is a way of resolving violence. Since the focus of this study was only intimate partner violence during pregnancy, aspects of physical injury and negotiation were left out. The three aspects of physical violence, emotional violence and sexual violence comprised 27 items. Items on the tool such as partner's use of threats, force, and insistence on anal sex were left out for cultural reasons; therefore, the final tool had 15-items. Pregnant women were asked if they were currently experiencing any of the violent acts stated in the tool, and the items were scored as 'yes' or 'no'. Women who answered 'yes' to any of the items were considered to be experiencing intimate partner violence during pregnancy.

### Data analysis

Data were entered and analysed using SPSS version 16.0. The prevalence of intimate partner violence was determined by dividing the number of women who experienced intimate partner violence by the sample size determined in this study. Bivariate and multivariate logistical regression analyses were performed to determine the factors associated with intimate partner violence during pregnancy. The odds ratio was used to measure association and its 95% confidence interval was computed. Statistical significance was set at  $P<0.05$ . All variables with  $P$ -value  $<0.05$  at bivariate analysis were entered in a multivariate logistic regression model to determine which variables were independently associated with intimate partner violence during pregnancy.

### Ethical considerations

The study was approved by the School of Health Sciences research and ethics committee of Makerere University and permission was also granted by the Soroti Regional Referral Hospital. Women who were below 18 years of age were treated as adults due to their pregnancy (Lane and Kohlenberg, 2012).

The sampled participants were informed of the purpose of the study and provided written consent. The participants were

then interviewed, and intimate partner violence was the last item to be assessed. In the section for intimate partner violence, the participants were informed again in advance that they were going to be asked about any incidents of intimate partner violence. In addition, the participants were assured that they were free to not only drop out of the study but also to not answer some or all the questions in the tool that they felt were sensitive. In this study, there were no dropouts or women who declined to answer some of the questions in the tool.

Professional support was provided to the victims of abuse, including advice to seek help from the social support groups available in the district.

## Results

A total of 180 pregnant women were recruited for the study (Table 1). The mean age of the study participants was 25.2 years (SD±5.268), while that of their partners was 30.52 years (SD±7.397).

The overall prevalence of intimate partner violence during pregnancy was 27.8%. The prevalence of physical, sexual and emotional violence was 10.6%, 10.0%, and 22.2%, respectively.

A number of pregnancy and relationship characteristics were collected (Table 2). The majority of the study participants (57%) were in the third trimester. Close to two-thirds of the study participants (60%) attended one or two antenatal visits.

During the bivariate logistic regression, several factors were significantly associated with intimate partner violence during pregnancy. However, after controlling for confounding in the multivariate logistic regression, only household average monthly income (aOR=2.890; 95% CI=1.085–7.697), experiences of intimate partner violence before pregnancy (aOR=2.579; 95% CI=1.193–3.313) and marital conflicts (aOR=2.354; 95% CI=1.110–4.990) were independently associated with intimate partner violence during pregnancy (Table 3).

## Discussion

Findings from this study suggest that the prevalence of intimate partner violence among women attending antenatal clinic at Soroti Regional Referral Hospital was higher than the national estimates, with household income, experiences of intimate partner violence before pregnancy and marital conflicts as the associated factors. Pregnant women who had a history of violence before pregnancy, had experienced marital conflicts and/or disagreements and who had an average household monthly income ≤\$30 USD or less were 2.6, 2.4 and 2.8 times more likely to experience intimate partner violence during pregnancy, respectively.

The prevalence of intimate partner violence during pregnancy in this study was significantly higher than the estimated 19.8% suggested by a meta-analysis of 92 studies (James et al, 2013), and the 15.2% average prevalence in Africa (Shamu et al, 2011). The prevalence of intimate partner violence during pregnancy in this study was comparable with findings from studies in east Africa (Mahenge et al, 2013; Makayoto et al, 2013), but lower than the 63% in Zimbabwe (Shamu et al, 2013). While the disparity in the reported prevalence rates could be attributed to methodological differences between studies, intimate partner violence was very common in this study setting, which reflects

**Table 2. Pregnancy and relationship characteristics (n=180)**

Variable	n	%
<b>Parity</b>		
Primiparous	64	35.6
Multiparous	116	64.4
<b>Number of children</b>		
<5	157	87.2
≥5	23	12.8
<b>Unwanted pregnancy</b>		
Yes	70	38.9
No	110	61.1
<b>Contraceptive use</b>		
Yes	80	44.4
No	100	55.6
<b>Experienced intimate partner violence before pregnancy</b>		
Yes	77	42.8
No	103	57.2
<b>Witnessed intimate partner violence during childhood</b>		
Yes	100	55.6
No	80	44.4
<b>Experienced intimate partner violence during childhood</b>		
Yes	87	48.3
No	93	51.7
<b>Age at marriage (years)</b>		
<18	47	26.1
≥18	133	73.9
<b>Duration of marriage (years)</b>		
<2	56	31.1
≥2	124	68.9
<b>Male dominance</b>		
Yes	89	49.4
No	91	50.6
<b>Marital conflicts</b>		
Yes	81	45
No	99	55
<b>Woman: substance and alcohol use</b>		
Yes	10	5.6
No	170	94.4
<b>Partner: substance and alcohol use</b>		
Yes	59	32.8
No	121	67.2

a cultural attitude of indifference towards intimate partner violence. In addition, the prolonged exposure to violence during the armed conflicts (Kinyanda et al, 2016), and the common misguided belief in the community that intimate partner violence was a male partner's expression of love for a woman may have created an accepting and cultivating environment.

**Table 3. Factors associated with intimate partner violence during pregnancy**

	Intimate partner violence		COR (95% CI)	AOR (95% CI)	P-value
	Yes (%) n=50	No (%) n=130			
<b>Partner's level of education</b>					
≤Primary	24 (39.3)	37 (60.7)	2.320 (1.184–4.548)	1.549 (0.684–3.509)	0.294
≥Secondary	26 (21.8)	93 (78.2)	1	1	
<b>Partner occupation</b>					
Employed	28 (22.8)	95 (77.2)	0.469 (0.238–0.925)	0.784 (0.340–1.795)	0.561
Unemployed	22 (38.6)	35 (61.4)	1	1	
<b>Average monthly income (Ugx.)</b>					
<100,000	44 (34.4)	84 (65.6)	4.016 (1.591–9.134)	2.890 (1.085–7.697)	0.034*
≥100,000	6 (11.5)	46 (88.5)	1	1	
<b>Unwanted pregnancy</b>					
Yes	27 (38.6)	43 (61.4)	2.375 (1.221–4.620)	1.141 (0.524–2.486)	0.74
No	23 (20.9)	87 (79.1)	1	1	
<b>Experienced intimate partner violence before pregnancy</b>					
Yes	34 (44.2)	43 (55.8)	4.299 (2.140–8.637)	2.579 (1.193–5.576)	0.016*
No	16 (15.5)	87 (84.5)	1	1	
<b>Witnessed intimate partner violence during childhood</b>					
Yes	35 (35.0)	65 (65.0)	2.333 (1.164–4.679)	1.527 (0.704–3.313)	0.284
No	15 (18.8)	65 (81.3)	1	1	
<b>Experienced intimate partner violence during childhood</b>					
Yes	34 (39.1)	53 (60.9)	3.087 (1.549–6.152)	1.970 (0.918–4.231)	0.082
No	16 (17.2)	77 (82.8)	1	1	
<b>Age at marriage (years)</b>					
<18	20 (42.6)	27 (57.4)	2.543 (1.254–5.157)	1.885 (0.860–4.130)	0.113
≥18	30 (22.6)	103 (77.4)	1	1	
<b>Marital conflicts</b>					
Yes	33 (40.7)	48 (59.3)	3.316 (1.672–6.579)	2.354 (1.110–4.990)	0.026*
No	17 (17.2)	82 (82.8)	1	1	
<b>Partner substance/alcohol abuse</b>					
Yes	23 (39.0)	36 (61.0)	2.224 (1.131–4.373)	1.125 (0.508–2.492)	0.772
No	27 (22.3)	94 (77.7)	1	1	

\*Statistically significant at  $P < 0.05$ ; 1: reference group

In-keeping with other studies (James et al, 2013; Iliyasu et al, 2013), low household income was associated with intimate partner violence during pregnancy in this study. Financial independence of women has been found to be protective in some settings (James et al, 2013). Past studies have indicated that pregnancy is associated with increased financial pressures and may increase a woman's financial dependency on her male partner. As a result, the perpetrator may exploit this economic vulnerability of the woman (James et al, 2013). In this study, a history of intimate partner violence before pregnancy was associated with intimate partner violence during pregnancy, which was consistent with findings from James et al (2013). This suggests that violence during pregnancy may simply be a continuation of abuse before pregnancy. More than 40% of

the respondents in this study who reported cases of marital conflict, fights or disagreement were exposed to intimate partner violence during pregnancy. Marital conflicts arise from patriarchal dominance and disagreements regarding the use of family resources (Sabbah et al, 2017), and the consequent intimate partner violence may be a way of resolving the conflicts or disagreements in the family.

#### Limitations

This was a hospital-based study and therefore certain findings of the study may not give the true picture of intimate partner violence during pregnancy among women in the community who did not attend antenatal care clinic. Furthermore, intimate partner violence is a sensitive subject that may be associated

with negative feelings of guilt and stigma. Consequently, the women may have been reluctant to disclose their experiences of intimate partner violence, which may have affected the reported prevalence in this study. Thus, the findings of this study should be interpreted within this limitation.

## Conclusion

The findings of this study suggest that intimate partner violence is very prevalent, with nearly one in three pregnant women facing violence from an intimate partner during pregnancy. Low household average monthly income, a history of intimate partner violence before pregnancy and marital conflicts were found to increase the likelihood of experiencing intimate partner violence during pregnancy.

## Recommendation

More longitudinal research is needed to investigate other risk factors for intimate partner violence during pregnancy and to clarify how the pattern of violence changes before and during pregnancy. Routine screening of intimate partner violence should be carried out during attending antenatal care so as to identify and manage cases of intimate partner violence during pregnancy. **AJM**

**Conflict of interest:** None declared.

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## Key points

- Pregnancy-induced physiological changes increase vulnerability to intimate partner violence
- Nearly one-third of the women in this study reported intimate partner violence during pregnancy
- Emotional violence was the most prevalent form of intimate partner violence during pregnancy
- Violence before pregnancy, low household income, and marital conflicts were found to be risk factors for intimate partner violence in this study

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