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Prevalence and correlates of intimate partner sexual violence among pregnant women in Lamwo district – Northern Uganda

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Abstract

Background and Aims: Intimate Partner Violence (IPV) is a silent pandemic, associated with 10% of all violent deaths and 290,000 years lost to morbidity. Intimate partner violence has been explicitly associated with not only health consequences of gynaecological and psychological nature among women but also deaths. The sexual form of intimate partner violence which increases in intensity during pregnancy is associated with higher risk of morbidity. The purpose of this study was to assess the prevalence and correlates of intimate partner sexual violence during pregnancy among pregnant women in Lamwo district, Northern Uganda.

Methods: A cross-sectional study was done at 6 facilities in Lamwo district from January-February 2022. Stratified and simple random sampling were used to sample 260 pregnant women out of a pregnant women population size of 810 women who sought antenatal care on a monthly basis from health facilities. The structured interviews were used for data collection. Data was entered in Epi Info version 7.0 and analysed in SPSS version 25 using the log-binomial model. A multivariate analysis was done. Statistical significance was set at $p<0.05$.

Results: The results showed a 24% prevalence of IPSV with 73% of pregnant women denying the use of measures to protect them from sexually transmitted infections. Pregnant women who were carrying their first, second, and third pregnancies were more likely to experience IPSV than women with more than 3 pregnancies (aPR 5.307 [CI = 1.965 -14.335], p = 0.001). In addition, women whose spouses had a habit of engaging in fights, had ever physically abused them, and had a preference for the gender of children demonstrated an increased prevalence of IPSV.

Conclusion: Out of every 10 pregnant women in the sample, two of them were sexually violated. The lower the gravidity and parity, the more likely to experience IPSV. Gravidity correlated more with IPSV than any other IPSV factor. The findings from this study may inform health interventions aimed at reducing intimate partner sexual violence.

Keywords: intimate partner, sexual violence, pregnant women, Uganda

Introduction

Violence against women and girls (VAWG) is considered to be one of the most prominent human rights violations affecting 27% of women aged 15-49 years in their lifetime globally.[1] Violence against women gained more global recognition as a women's rights violation since the advent of the COVID-19 pandemic following which it was declared to be a shadow pandemic with the most prevalent form of VAWG being intimate partner violence.[2,3] Intimate partner violence has been explicitly associated with not only health consequences of gynaecological and psychological nature among women but also contributes to 10% of all violent deaths, and it is associated with up to 290,000 years of potential life lost by its victims.[4]

The World Health Organization defines intimate partner sexual violence as "attempts to force a partner to engage in a sex-act of any kind, actual forceful engagement in a penetrative sex act, denial of a partner to use measures that can protect them from sexually transmitted infections during intercourse, denial to use contraceptive services, and forced abortion."[5] In addressing concerns around IPSV, sustainable development goal five (SDG 5) target two seeks "to eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking, sexual and other types of exploitation." Several studies have reported intimate partner sexual violence (IPSV) in pregnancy to include attempted and actual forced penetrative sex-acts and denial to use infection control measures, all of which have negative consequences, including emotional distress among pregnant women.[6,7,8] A South African, cross-sectional study that investigated the effect of IPSV on pregnancy outcomes by Covender et al. reported that among adolescent mothers, IPSV victims suffer from Post-Traumatic Stress Disorder (PTSD), somatic symptoms, and suicidal ideation which leads to higher incidences of antepartum depression, during which cortisol production significantly increases during pregnancy, subsequently affecting foetal growth.[9] This had implications on foetal outcomes. Also, rape during pregnancy has been associated with urinary tract infections such as candidiasis and bacterial vaginosis. This leads to poor pregnancy outcomes such as spontaneous abortion, preterm labour chorioamnionitis, and postpartum complications. Intimate partner sexual violence not only affects the pregnant woman but also has tremendous effects on the foetus and neonates. It is linked to many negative outcomes, including preterm birth, premature rapture of membranes (PROM), and neonatal ICU admission.[10] Current evidence suggests that there are significant increments in the risk of perinatal death among women exposed to IPSV.[11,12,13]

However, despite these global efforts to eliminate IPSV, it is still the highest contributor to gender based violence with a 40% prevalence among married women according to Uganda Demographic Health Survey 2022, surpassing the rest of the world by 10%.[14]

In Lamwo district, Northern Uganda, IPSV has a prevalence of 59.9%, characterized by women experiencing emotional, physical, or sexual violence from a spouse. Even with such figures reported, it is noted that 51% of such cases go unreported partly due to the tolerance or acceptance of violence that is rooted in socio-cultural beliefs that men are unconditionally entitled to sex, bureaucratic systems, and delays amongst others.[14] There is relatively limited documentation of IPSV among women during pregnancy in Lamwo District. This study, therefore, sought to assess the prevalence and correlates of intimate partner sexual violence during pregnancy among pregnant women in Lamwo district, Northern Uganda to generate evidence that will inform the implementation of policies to improve maternal health outcomes.

Methods

Research Design

A cross-sectional study involving the analysis of predictors of IPSV was conducted among pregnant women in Lamwo district. The study took place in 23 health facilities which comprised of eighth Health Centre IIIs, 13 Health Centre IIs, and two Health Centre IVs. Uganda's national health system consists of National Referral Hospitals, Regional Referral Hospitals, and the district health system. The district health system is further divided into health sub-districts. It includes District General Hospitals, Health Centres IV, III, and II, and Village Health Teams.[15] The HC IV serves a county, HC III a subcounty, and HC II a parish, respectively.

Study Population

The study population were pregnant women across all trimesters who were seeking antenatal care services from any antenatal clinic at health facilities in Lamwo district January-February 2022.

Sampling

Sampling was done in two stages. All Health Centre IVs were selected as they there are the only facilities at that level in the whole District, hence providing a comprehensive representation of higher-level facilities. Health Centre IIIs were stratified and simple random sampling then used to sample 50% of the constituent health centres in each of the strata. Simple random sampling was conducted using the lottery method, in which names of health centres, therein, were written on pieces of paper, folded, and put in the sample container from which ruffling was done and one picked at a time, without replacement. Once all required health centres had been sampled from each of the strata, each was approached and sampling of the pregnant women was commenced.

At each of the facilities, including the Health Centre IVs, it was realized that only a few pregnant women made physical appearance at the facilities on a daily basis, with the supposed justification being that the district apparently had an initiative for reaching out to pregnant women at community level, providing each of them with iron and folic acid supplements. With the few numbers of pregnant women at health centres, random sampling could not be used to sample them as that may have compromised the obtained required sample used. Therefore, consecutive sampling was used instead. At each facility ANC clinic, each pregnant woman available was assessed for eligibility and when found to be eligible, interviewed.

The study ensured that all the women that were sampled provided accurate and valid data, especially about IPSV and spousal characteristics, through using pre-tested, data collection instruments based on the World Health Organization and CDC indicators used to assess intimate partner sexual violence during pregnancy. We conducted an assessment of the tool's reliability and validity to ensure a consistent interpretation of the questions. The tool underwent validation by psychiatrists, public health specialists, obstetricians, and gynaecologists. A pretest study was done involving 28 women of a similar setting at Atiak HC IV in Amuru district. The tool was evaluated for clarity and unambiguousness based on participants' feedback. Training of interviewers who were well versed with English and the local language "Acholi" used in the study area was conducted for three days. Finally, informed consent was sought while upholding confidentiality, yielding valid responses.

Inclusion Criteria

Participants were 18 years or older or emancipated minors (i.e., girls between 15-17 years who are married or living independently as heads of households). Excluded were pregnant women who had conceived as a result of sexual assault (rape) from a stranger who was violent with them, since such assault does not fit the category of IPSV in which the perpetrator is an actual spouse.

Ethical Approval

Acquisition of approval was obtained from the ethical review committee of Uganda Christian University (UCU); the letter of

introduction that was obtained was used to seek permission from the district health office to collect data from the selected health facilities in Lamwo district. Informed consent was sought from participants prior to the study.

Privacy

In order to maintain the confidentiality of each participant, pseudonyms were assigned to each participant in the study so that their identities could not be revealed on the questionnaires on which their responses were captured.

The descriptive statistics in this study include experiences of any forms of IPSV, namely: intimate partner sexual coercion, intentional refusal to protect against STI's & Pregnancy, and Frequency of Sexual coercion. The subject characteristics included interpersonal, spousal, and societal characteristics. Data was collected using an Interviewer administered structured questionnaire that had questions including socio demographic characteristics, intimate partner sexual violence status, information related to the characteristics of their spouses, and societal characteristics. Interviews were conducted by a team of four trained research assistants and the principal investigator in a private room at the health centres to ensure confidentiality. Each interview lasted 30-40 minutes on average.

Data Analysis

Data analysis at univariate level generated frequencies and percentages of each variable that was studied. At the Bi-variate level, cross tabulation and, relationships between key variables were analysed descriptively. This was done at bivariate level, at which point a pair of variables (one independent and one dependent) was analysed, without adjustment for confounders, using a log-binomial model. The model was used because the magnitude of the outcome of the study (IPSP prevalence) was more than 10%, making odds rations potentially misleading.[16] This analysis was limited to only variables whose cross tabulations had no zero values in the cells because relative risks are only computed with numbers exceeding zero.

Statistical significance at this point was set at $p<0.05$, and the findings were reported using odds ratios or prevalence ratios depending on the model that was used. At Multivariate level variables that were found to be statistically significant at bivariate analysis were included in the model. Backward stepwise Likelihood Ratio (LR) was used to find the significant predictors of intimate partner sexual violence among the pregnant women. The criteria for entering and removing the independent variables from the backward stepwise model were having a $P < 0.05$ in the final model. Statistical significance at this point was set at $p<0.05$, and the findings were reported using adjusted prevalence ratios, given that at this point, adjustment for confounders was done for each of the relationships. Variables that remained statistically significant after adjustment for confounders were considered to be the correlates of IPSV during pregnancy among pregnant women in Lamwo district.

Limitations

Although the use of WHO/CDC indicators and rigorous interviewer training substantially improved data reliability, we acknowledge that cultural norms and stigma may have led to under-reporting of marital rape.

Results

Key socio-demographics information including age, education, marital status, duration in marital, religious denomination, and employment status for the women from the study among pregnant women in Lamwo district, Northern Uganda is presented in Table 1. Most respondents fell between the ages of 18 and 24 (59.2%) followed by the second largest age group, 25-31years (31.9%). More than three-quarters were cohabiting (76.9%), and nearly two-thirds had been in a marital relationship for less than five years (65.8%). Many of the pregnant women were Catholic (59.2%), followed by Christian (Pentecostal) (29.2%). More than four-fifths were formally educated (86.5%) of which the majority had primary education as highest achievement (65.8%). More than four-fifths were not currently employed (90.8%).

Table 1. Socio demographics

Indicator		Percent / Frequency N=260
		% (n)
	Female	100 (260)
Age		
	18-24	59.2 (154)
	25-31	31.9 (83)
	32-38	8.8 (23)
Marital status		
	Married	23.1 (60)
	Cohabiting	76.9 (200)
	Duration in marital	
	Less than five years	65.8 (171)
	More than five years	34.2 (89)
Religious denomination		
	Catholic	59.2 (154)
	Christian (Pentecostal)	29.2 (76)
	Muslim	2.3 (6)
	Born-again	9.2 (24)
Formally educated		
	Yes	86.5 (225)
	No	13.5 (35)
Education Level		
	Primary	65.8 (148)
	Secondary	28.9 (65)
	Tertiary	5.3 (12)
Currently employed		
	Yes	9.2 (24)
	No	90.8 (236)

The study findings show a quarter, 24% (n=63), of the pregnant women had experienced intimate partner sexual violence of various forms during their current pregnancies in Lamwo district, Northern Uganda. Table 2 presents the forms of IPSV experienced and their magnitude. More than four-fifths of the pregnant women interviewed had not experienced spouse/intimate partner coercion or unwanted sexual advances since conception of the current pregnancy (90.8%), spousal denial to use measures that can protect pregnant wife from sexually transmitted infections during intercourse (81.5%), and 86.2% had not experienced forceful sexual intercourse. Half of the pregnant women who had been forced to have sex during pregnancy reported it had been on one occasion (50.0%).

Table 2. Forms of IPSV experienced and their magnitude

Indicator		Percent / Frequency % (n)
Spouse coercion since conception of current pregnancy		
	Yes	9.2(24)
	No	90.8(236)
Spouse denial to use protective measures from STIs, during intercourse		
	Yes	18.5(48)
	No	81.5(212)
Spouse forcefully had sexual intercourse		
	Yes	13.8(36)
	No	86.2(224)
Frequency of forceful sex during current pregnancy		
	Once	50.0 (18)
	Twice	16.7(6)
	More than thrice	33.3(12)

Disaggregation of the forms of IPSV by level of incidence among the pregnant women are presented in Table 3. The majority (73.0%) had been denied using measures that can protect pregnant woman from sexually transmitted infections, during intercourse, with the second most prevalent form being forceful sexual intercourse (52.4%).

Table 3. Disaggregation of forms of IPSV during pregnancy

Indicator	IPSV status	
	Experienced	Not experienced
	N=63	N=197
	% (n)	% (n)
Spouse coercion since conception of current pregnancy		
Yes	22(34.9%)	2(1.0%)
No	41(65.1%)	195(99.0%)
Spouse denial to use protective measures from STIs, during intercourse		
Yes	46(73.0%)	2(1.0%)
No	17(27.0%)	195(99.0%)
Spouse forcefully had sexual intercourse pregnant wife		
Yes	33(52.4%)	3(1.5%)
No	30(47.6%)	194(98.5%)
Frequency of forceful sex during current pregnancy		
Once	17(51.5%)	1(33.3%)
Twice	5(15.2%)	1(33.3%)
More than thrice	11(33.3%)	1(33.3%)

The bivariate analysis findings of the relationship between individual characteristics and IPSV showed that pregnant women who were carrying their third pregnancy (cPR = 5.211) and first pregnancy (cPR = 5.162) were more likely to experience IPSV 5 times higher than those carrying their second pregnancy (cPR = 4.433). The prevalence of IPSV during pregnancy was nearly five times as high among pregnant women who had ever experienced any intimate partner sexual violence in any of their previous pregnancies (cPR = 4.977) compared to those who had never experienced that violence. The prevalence of IPSV was less by 49% among pregnant women who rated the level of communication with their spouse as being high (cPR = 0.517) compared to those who rated it as being low (Table 4).

The relationship between interpersonal characteristics and IPSV showed six variables were statistically significant: women whose spouses allowed them to talk with neighbours or visit friends were more likely to experience IPSV during pregnancy 14 times (cPR = 14.038) as compared to women whose spouse had a habit of engaging in fights (cPR = 3.176), women whose spouses had a preference for particular gender of children (cPR = 2.096), and those whose partners had ever physically abused them (cPR = 1.703). The least factor to influence sexual violence was "spouses allowed them to go somewhere at own accord, without consequences" (cPR = 0.316), and "whose spouses used alcohol" (cPR = 0.308).

The results of logistic regression modelling exploring the 10 indicators significant at the bivariate level, only the level of communication with spouse was insignificant after adjustment for confounders at multivariate level (Table 4). The prevalence of IPSV during pregnancy was 12 times higher among women whose spouses allowed them to talk with neighbours or visit friends (aPR = 12.554) compared to pregnant women not permitted. The findings show that pregnant women who were carrying their first pregnancy (aPR = 4.844) and second pregnancy (aPR = 4.696) were four times more likely to experience IPSV during pregnancy. However, women who were carrying their third pregnancy had an IPSV prevalence five times higher (aPR 5.307) compared to those who had carried more than three pregnancies at the time. This was followed by pregnant women who had ever experienced any intimate partner sexual violence in any of their previous pregnancies (aPR = 4.889), spouse had a habit of engaging in fights (aPR = 4.043), whose spouses had ever physically abused them (aPR = 1.838), and women whose spouses preferred a specific gender of children (aPR = 1.684). The women whose spouses used alcohol (aPR = 0.308) and spouses allowed them to go somewhere at own accord, without consequences (aPR = 0.394), were the least likely to be associated with sexual violence during pregnancy. Finally study findings revealed that indicators of gravidity (1-3): ever experienced any spouse sexual violence during pregnancy, spouse has a habit of engaging in fights, substance used if non-illicit (alcohol), and spouse ever physically abused wife were significantly associated with sexual violence among pregnant women (Table 4).

Table 4. Multivariate analysis of spouse sexual violence during pregnancy

Indicator	cPR (95% CI)	P value	Sig	aPR (95% CI)	P value	Sig
Gravidity						
One	5.162 (2.044 - 13.040)	.001	*	4.844 (1.896 - 12.378)	.001	*
Two	4.433 (1.798 - 10.934)	.001	*	4.696(1.869 - 11.803)	.001	*
Three	5.211 (1.989 - 13.657	.001	*	5.307 (1.965 -14.335)	.001	*
More than three	1.000			1.000		
Ever experienced any Spouse sexual violence during pregnancy						
Yes	4.977 (3.260 - 7.597)	.000	*	4.889 (3.177 - 7.523)	.000	*
No	1.000			1.000		
Level of communication with spouse						
High	.517(.278 - .962)	.037		.764 (.351 - 1.661)	.497	
Moderate	.633 (.390 - 1.027)	.064		.758 (.456 - 1.260)	.285	
Low	1.000			1.000		
Level of education						
Primary	.352 (.133 - .933)	.036		.324 (.120 - .874)	.026	*
Secondary	.871 (.487 - 1.557)	.642		.835 (.466 - 1.498)	.546	
Post-secondary	1.000			1.000		
Spouse has a habit of engaging in fights						
Yes	3.176 (2.048 -4.926)	.000	*	4.043 (2.146 - 7.615)	.000	*
No	1.000			1.000		
Substance used if non-illicit						
Alcohol	.308 (.189 - .502)	.000	*	.308 (.189 - 0502)	.000	*
Tobacco	.250 (.041 - 1.541)	.135		.250 (.041 - 1.541)	.135	
Both (Alcohol and Tobacco)	1.000			1.000		
Spouse allows woman to go somewhere at own accord, without consequences						
Yes	.316 (.143 - .698)	.004	*	.394 (.181 - .856)	.019	*
No	1.000			1.000		
Spouse allows woman to talk with neighbours or visit friends						
Yes	14.038 (1.996-98.737)	.008	*	12.554 (1.767 - 89.212)	.011	*
No	1.000			1.000		
Spouse ever physically abused wife						
Yes	1.703 (1.109 - 2.616)	.015		1.838 (1.197 - 2.824)	.005	*
No	1.000			1.000		
Spousal preference for gender of children						
Yes	2.096 (1.376 - 3.193)	.001	*	1.684 (1.031 - 2.751)	.037	*
No	1.000			1.000		

Note. * p<.05; represents significant indicators for spouse sexual violence during pregnancy.

Discussion

The prevalence of IPSV in the study was 24%, among pregnant women with 73% of them being denied by their spouses from using measures to protect them from sexually transmitted infections. This finding indicates the persistent IPSV trend in the general population of the country. This may be due to unrelenting practices from cultures, and traditions of some subregions in Uganda where male dominance is highly prevalent even in the in the context of conjugal rights.[17]

This prevalence is slightly higher than the national prevalence of 22%.[18] This could be due to the fact that Uganda ratified the Convention on the Elimination of All Forms of Discrimination Against Women and Uganda's Constitution accords women full and equal dignity of the person with men and prohibits any vice that undermines their welfare, dignity, or status.[19] These legal provisions likely foster a socio-legal environment in which women are less vulnerable to the factors that typically drive IPSV. However, a study done reported a higher prevalence at 27.8% in Eastern Uganda and 36.1% in Western Uganda.[20]

Similarly, prevalence of 24% is lower compared to the recent meta-analysis findings which indicated that Northern Uganda a region from which Lamwo district belong has one of the unacceptably highest prevalence of IPSV (70.3%) in SSA and 30% in East Africa.[21] The low prevalence could be due to lax in restrictive gender norms (such as women subordinate, bride payment and justified violence)[22], improved household economic security and adequate institutional responses in a predominantly patriarchal society. Likewise, talking sexual experience could be less sensitive in Lamwo. Therefore, the chances of disclosing if they are experiencing some form of sexual violence from their intimate partners is likely to be high. particularly with a supportive, confidential, and respectful process.

The prevalence of this study is comparable to the studies done in Bangladesh (26.3%)[23] and South Africa (26%).[24] Also, results are consistent with findings in Ghana and Ethiopia at 24.4%.[25,26] The similarity in prevalence across diverse cultural, geographical, and socioeconomic contexts suggests that IPSV is a global public health concern during pregnancy, not an isolated phenomenon.

The IPSV prevalence of 24% in this study is lower than in several studies in Nigeria (34.6%)[27]and Kenya (34.8%).[28] In contrast, the findings were higher than the prevalence of IPSV globally at 14%, in Tanzanian (15.4%), Ethiopia (18.6%), Bangladesh (18.5%), Vietnam (10%). and Ghana (3.3%).[29-34] This could be attributed to high levels of awareness and sensitization of men in those settings, which calls for more intervention on IPSV in the study area.

Overall, the difference in IPV prevalence during pregnancy between the current study and some other studies included women who were less than 24 weeks gestation or beyond 20 weeks gestation,[34,35] yet the current study included pregnant women in all trimesters.[33] It is therefore possible that there was some under estimation of IPV following the exclusion of some pregnant women in the first and early second trimesters. Secondly, there were also fundamental methodological differences between the studies.

In this study, the second most prevalent form of IPV was forceful sexual intercourse at 52.4%. This is higher than the Indian study at 30.7%.[37] This could be linked to the past civil wars that were characterised by the violation of human rights, including sexual violence against women.[38] The forceful sex puts women at risk of STIs including HIV infection, vaginal tract trauma, and obstetric complications.[39-41] This calls for policy change and action towards women empowerment through education and skill development.

The findings show that primigravida women were more likely to experience IPSV during pregnancy, and the lesser the parity the more likely for a woman to experience IPSV from their partners. This could be attributed to the effect of pregnancy on sexual drive which varies across gravidities and parities.[42-44] A survey reported that women of lower parity and gravidity are more likely to experience low sex drive and

sexual dysfunction during pregnancy.[14] As such, they tend to be more resistant to demands for intercourse by the spouse during pregnancy. This may be perceived as disrespect by a man in a patriarchal society such as Lamwo, which can subsequently lead to marital rape in a bid to show authority and dominance.

Similarly, several studies have reported the odds of experiencing IPSV was significant among pregnant women whose spouses had a habit of engaging in fights and had ever physically abused them.[45-47] This could be that men who are fond of physical abuse are also more likely to be embracers of patriarchy, and hence, more likely to demonstrate male dominance whenever their masculine positions are threatened, for instance, when their wives deny them intercourse even when pregnant.

Also, this study is consistent with several studies of women whose spouses preferred a specific gender of children were more likely to experience IPSV in this study.[48,49] In most cases, the futile attempts to have a particular gender of the child particularly sons over daughters by a man may aggravate the assertiveness of a pregnant woman's consistent preference of a particular gender causing conflict. Subsequently, this bolsters a propensity of the man to sexually violate the wife.

Additionally, a similar study established that IPSV was more prevalent among women who had their first or third and subsequent pregnancies and not their second pregnancies.[21] This could be because of various new stressors and uncertainties, unmet relational expectations during their first pregnancies while in the third and subsequent pregnancies the increased pressure of unmet needs, increased stress, financial strain and change in relation dynamics could predispose to more IPSV than the second pregnancy. The lower prevalence of IPSV in the second pregnancy would mean a period of transition and adjustment with stronger social support network for women, increased pressure of family expansion, and more partner support. Also, different gravidities experience varying levels of marriage dissatisfaction which might lead to violence.

This study has both strengths and limitations. The strength of this study can be attributed to WHO and CDC indicators used to assess IPSV during pregnancy. This yielded valid responses for the outcome variables, thus, producing a more reliable and unbiased assessment. However, it cannot be entirely ruled out that there was no concealment of IPSV, like missed marital rape that may have affected the magnitude of the outcome obtained. Also, the study was confined to female participants only. Yet, IPSV is not a gender specific problem as the experiences of men also have significant implications for health service delivery.

Conclusion

Intimate partner sexual violence is prevalent among pregnant women in Lamwo district. Out of every 10 pregnant women, two of them are sexually violated with the most common form of intimate partner sexual violence among them being denial to use measures used to protect her from sexually transmitted infections. The implication is to understand how the IPSV factors correlate with IPSV. Findings indicate gravidity, habit of engaging in fights by the spouse, having ever been physically abused by spouse, and spousal preference for a gender of children correlate more with IPSV. By pinpointing these psychosocial and demographic correlates, the data can already inform targeted public-health strategies, such as community-based screening for IPV in antenatal clinics and tailored counselling for couples with a history of physical or verbal aggression in Lamwo district and other similar settings. Further research is needed,particularly qualitative approaches with the ability to gain insight into the perceptions of victims and perpetrators of intimate partner sexual violence.

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Appendix A.

Questionnaire on prevalence and correlates of intimate partner sexual violence during pregnancy among pregnant women in Lamwo district – northern Uganda

Section A. Socio demographic characteristics of the pregnant woman

Question number	Question	Choices
1	Age in full years	
2	What is your current marital status?	Married Cohabiting Other
3	For how long have you been in a marital relationship?	Less than five years More than five years
4	To what religious denomination do you belong?	Catholic Christian (Pentecostal) Muslim Other
5	Are you formally educated?	Yes No
6	If yes, to what level?	Primary Secondary Post-secondary
7	Are you currently employed?	Yes No

Section B. Intimate partner sexual violence

Question number	Question	Choices
8	Since conception of the current pregnancy, has you spouse/intimate partner coerced you or made unwanted sexual advances to you?	Yes No
9	Since conception of your current pregnancy, has your husband denied you chance to use measures that can protect you from sexually transmitted infections, during intercourse?	Yes No
10	Since conception of the current pregnancy, has your husband/spouse/intimate partner ever forcefully had sexual intercourse with you?	Yes No
11	If yes above, how many times has that happened during this pregnancy?	Once Twice Thrice More than thrice

Section C. Intrapersonal characteristics

Question number	Question	Choices
12	Do you have any form of disabilities?	Yes No
13	If yes, what form of disability do you have?	Physical disability Sensory disability
14	In what trimester are you currently?	Second trimester Third trimester
15	Since conception, have you used any substances of abuse?	Yes No
16	If yes, which ones have you used so far	Illicit substances Non-illicit Both
17	If illicit, which ones have you used?	Marijuana Khat Other
	If non illicit, which ones have you used?	Alcohol Tobacco Other
17	How many pregnancies have you carried so far?	One Two Three More than three
18	Have you ever experienced any intimate partner sexual violence in any of those pregnancies?	Yes No
19	Which form of intimate partner sexual violence was it?	Emotional Physical Sexual
20	How many living children do you currently have?	One Two Three More than three
21	Did you plan to have the current pregnancy?	Yes No
22	Do you usually communication with your spouse?	Yes No
23	If yes, how do you rate your level of communication with your spouse?	High Moderate Low

Section D. Spousal Characteristics

Question number	Question	Choices
24	In what age range is your husband/spouse/intimate partner	Between 18 and 28 years Between 29 and 39 years Between 39 and 49 years More than 49 years
25	To what religious denomination does your husband/spouse/intimate partner belong?	Catholic Christian (Pentecostal) Muslim Other
26	Is your husband/spouse/intimate partner formally educated?	Yes No
27	If yes, to what level?	Primary Secondary Post-secondary
28	Is your husband/spouse/intimate partner currently employed?	Yes No
29	Does your husband/spouse/intimate partner have a habit of engaging in fights	Yes No
30	Does he have any form of disabilities?	Yes No
31	If yes, what form of disability does he have?	Physical disability Sensory disability
32	Does your husband/spouse/intimate partner use any substances of abuse?	Yes No
33	If yes, which ones does he use	Illicit substances Non-illicit Both
34	If illicit, which ones does he use?	Marijuana Khat Other
35	If non illicit, which ones have you used?	Alcohol Tobacco Other
36	Since conception, have you ever stayed with spouse's parents?	Yes No
37	Has your husband/spouse/intimate partner officially brought dowry your parents?	Yes No
38	Does your husband/spouse/intimate partner participate in gambling like sports betting or playing cards?	Yes No
39	Does your spouse allow you to make your own decisions?	Yes No
40	Does your spouse allow you to go somewhere, at your own accord, without consequences?	Yes No
41	Does your spouse allow you to go to talk with your neighbors or visit friends?	Yes No
42	Has your husband/spouse/intimate partner ever physically abused you?	Yes No
43	Does your husband have a preference for a particular gender of children?	Yes No
44	If yes, which gender does he currently prefer?	Female Male

Section E. societal characteristics

Question number	Question	Choices
45	In this society, intimate partner sexual violence is considered to be normal	Strongly disagree Disagree Undecided Agree Strongly Agree
46	In our society, a man has a right to have sex with his wife any time they desire, irrespective of hesitance from the wife	Strongly disagree Disagree Undecided Agree Strongly Agree
47	Having sex during pregnancy is highly regarded in this society?	Strongly disagree Disagree Undecided Agree Strongly Agree
48	Marital rape is not considered a grave crime traditionally, even during pregnancy?	Strongly disagree Disagree Undecided Agree Strongly Agree
49	A woman should be ready to have sex at any time, according to culture?	Strongly disagree Disagree Undecided Agree Strongly Agree
50	Does anyone in this society provide you with emotional support?	Strongly disagree Disagree Undecided Agree Strongly Agree
51	A pregnant woman that is sexually violated is not allowed to report to the elders, it is shameful	Strongly disagree Disagree Undecided Agree Strongly Agree