

Research Article

Domestic Violence among Pregnant Mothers in Northwest Ethiopia: Prevalence and Associated Factors

Berhanu Boru Bifttu,¹ Berihun Assefa Dachew,²
Bewket Tadesse Tiruneh,¹ and Abarham Zeleke Zewoldie³

¹Department of Nursing, University of Gondar College of Medicine and Health Sciences, Gondar, Ethiopia

²Department of Epidemiology and Biostatistics, University of Gondar College of Medicine and Health Sciences, Institute of Public Health, Gondar, Ethiopia

³Federal Ministry of Health, Medical Service Directorate, Addis Ababa, Ethiopia

Correspondence should be addressed to Berhanu Boru Bifttu; berhanuboru@gmail.com

Received 4 April 2017; Revised 28 September 2017; Accepted 7 November 2017; Published 5 December 2017

Academic Editor: Paul Van Royen

Copyright © 2017 Berhanu Boru Bifttu et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Background. Domestic violence against women is a serious public health concern and human rights violation among pregnant mothers because of its negative effect on the life of both the mother and the fetus. Thus, the aim of this study was to assess the prevalence of domestic violence and associated factors among pregnant women. **Methods.** An institution based quantitative cross-sectional study was conducted among 418 women using a systematic random sampling technique. Binary logistic regression analysis and adjusted odds ratio with 95% confidence interval were used to identify the associated factors. **Results.** Overall, the prevalence of domestic violence was found to be 25.4%. Of this, the prevalence of psychological, physical, and sexual violence was 24.5%, 8.1%, and 2.4%, respectively. Low educational status (AOR = 4.59, CI: 1.496, 14.070), rural residency (AOR = 5.53, CI: 2.311, 13.249), unplanned pregnancy (AOR = 4.34, CI: 2.345, 8.020), and late initiation of antenatal care (AOR = 5.41, CI: 1.493, 19.696) were factors associated with domestic violence at p value < 0.05. **Conclusion.** Overall, more than quarter of the study participants had experienced domestic violence. Lower educational status, rural residency, unplanned pregnancy, and late initiation of antenatal care were factors associated with domestic violence. Thus, the authors suggest strengthening provision of women's reproductive health information.

1. Background

Despite the Universal Declaration of the Human Rights, as all people begin to be recognized regardless of age, sex, race, color, language, religion, or any other factors, women have continued to suffer from domestic violence and discrimination in their homes and/or society [1]. According to the World Health Organization (WHO), domestic violence was defined as “the range of sexually, psychologically, and physically coercive acts used against adult and adolescent women with current or former male intimate partners” [2]. Domestic violence during pregnancy is the physical, sexual, or psychological violence, inflicted on a pregnant woman by a current or former male intimate partner [3].

Globally, the magnitude of domestic violence against women is a serious public health concern [4]. For example,

according to a WHO multicountry study, the lifetime prevalence of physical, sexual, or both physical and sexual violence ranges from 15% to 71% [5]. During pregnancy, the prevalence of domestic violence ranges from 1 to 28% [2] and from Africa it ranges from 2% to 57% [6]. In Ethiopia, domestic violence has been documented as a culture specific phenomenon and is influenced by religion and the sociocultural context [4]. For example, the available evidence revealed the widespread agreement of wife beating and high prevalence of domestic violence [7]. A recently released report of Ethiopian Demographic and Health Survey (2016 EDHS) revealed the existence of still high prevalence of domestic violence with the form of physical, emotional, or sexual violence, and from this report, it is observed that the prevalence of domestic violence was increased against older women (40–49), formerly married women, women living in rural

areas, and women with lower educational level [8]. There are also other community based studies that revealed the existence of domestic violence with the prevalence ranging from 50 to 76.5% during lifetime and from 30 to 72.5% for the past 12 months [8–10], and for pregnant mothers, the reported prevalence of domestic violence ranged from 32.2% (of this, the prevalence of physical, psychological, and sexual violence was 14.8%, 24.9%, and 11.3%, resp. [11]) to 44.5% (of this, 29.2%, 16.3%, and 30% of physical, psychological, and sexual violence were and 14.8%, 24.9%, and 11.3%, resp.) [12, 13].

Domestic violence affects all the spheres of women's lives such as self-esteem, productivity, autonomy, capacity to care for themselves and their children, ability to participate in social activities, and even death [4, 5]. For pregnant mothers, domestic violence has special concern due to the potential negative impacts for both the mother and the unborn infants, such as placental damage, rupture of the uterus, fetal trauma [2, 6, 12], spontaneous abortion, bleeding, preterm labor, preterm delivery, low birth weight, and death [13–15]. Studies from developed and some developing countries revealed the presence of high magnitude of domestic violence and its negative consequences [2, 6]. In Ethiopia, even though studies were carry out on women, little attention was given for pregnant mothers. Thus, the aim of this study was to assess the prevalence of domestic violence and associated factors among pregnant women.

2. Methods

2.1. Study Design. A clinical based cross-sectional quantitative study design was conducted.

2.2. Study Area. The study was carried out in Gondar town, Northwest Ethiopia. Gondar town is located at 748 kilometers from the capital city of Ethiopia, Addis Ababa.

2.3. Sampling Procedure and Sample Size. Participants of the study were all pregnant mothers seen and followed up at the antenatal care clinics of public health facilities in Gondar town. The sample size of the study was determined based on the Leslie-Kish formula, $n = z^2 p(1 - p)/d^2$, where z is the normal standard deviation set at 1.96, with a confidence level specified at 95% and a tolerable margin of error (d) at 5%, and based on prevalence (p) of 50% and considering 10% nonresponse rate, the minimum sample size (n) was 422. For the sampling procedure, first, all public health facilities in Gondar town were considered, and then based on the number of pregnant women that visited each health facility during the previous year, proportional allocation of the total sample size was carried out to get the required sample size from each health facility. Finally, the determined samples were selected by a systematic random sampling technique.

2.4. Instruments. For the assessment of domestic violence, the WHO (2005) multicountry study questionnaire was used. This questionnaire has four items for psychological violence, six items for physical violence, and three additional items for sexual violence [2]. In this study, the prevalence

of domestic violence was defined as any violence whether physical, psychological, and sexual or any combination of the three, regardless of the legal status of the relationship. Physical violence was defined as one or more intentional acts of physical aggression such as pushing, slapping, throwing, hair pulling, punching, hitting, kicking, or burning, perpetrated with the potential to cause harm, injury, or death. Psychological/emotional violence was defined as one or more acts or threats of acts, such as shouting, controlling, intimidating, humiliating, and threatening the victim. Sexual violence is defined as the use of force, coercion, or psychological intimidation to force the woman to engage in a sex act against her will, whether or not it is completed. Social support was measured with a 12-item multidimensional Likert type agreement scale. The total sums of score range from 7 to 84. High level of perceived social support was defined as a score between 69 and 84, moderate level of perceived social support was defined as a score between 49 and 68, and low level of perceived social support was defined as a score between 12 and 48 [16].

2.5. Data Collection and Analysis. Quantitative cross-sectional data were collected by face-to-face interviewer-administered techniques using paper and pen in a private room. Data were coded and entered into EPI Info version 3.5.3 statistical software and then exported to SPSS for Windows version 20 program for analysis. Descriptive statistics (like frequencies, tables, percentages, means, and standard deviation) were used for the description part. Bivariate and multivariable logistic regression with an odds ratio of 95% confidence interval were used to identify the associated factors. A significance level of 0.05 was taken as a cut-off value for all statistical significance tests.

2.6. Ethical Consideration. A formal letter of permission was obtained from the Institutional Review Board (IRB) of the University of Gondar and submitted to each health institution. After clear and detailed explanation of the purpose, risks, and benefits of the study to the study subjects, written informed consent was sought for each participant who agreed to participate in the study. Only anonymous data was collected in private rooms.

3. Results

Four hundred twenty-two participants were targeted for this study. Of these, 418 participants were enrolled with a response rate of 99.1%.

3.1. Sociodemographic Characteristics of the Respondents. The mean age of the respondents was 26.99 ± 9.86 (SD) years and 171 (40.9%) of the mothers were in the age range of 25–29 years. Three hundred seventy-four (89.5%) of the respondents belonged to Amhara by ethnicity and 317 (75.8%) were Orthodox Christian in religion. Regarding the marital status, majority (375, 89.2%) of them were married. One hundred forty-two (34%) of the mothers had secondary education.

TABLE 1: Sociodemographic characteristics of participants in Gondar town, 2015 ($n = 418$).

Characteristics	Frequency	Percent
<i>Age</i>		
17–19	21	5
20–24	115	27.5
25–29	171	40.9
30+	111	26.6
<i>Current marital status</i>		
Single	39	9.3
Married	373	89.2
Divorced/separated	5	1.2
Widowed	1	0.2
<i>Religion</i>		
Orthodox Christian	317	75.8
Muslim	71	17
Protestant	30	7.2
<i>Ethnicity</i>		
Amhara	374	89.5
Tigre	28	6.7
Oromo	16	3.8
<i>Educational status</i>		
Cannot read and write	102	24.4
Primary education	76	18.2
Secondary education	142	34
College and above	98	23.4
<i>Occupational</i>		
Governmental	65	15.6
Merchant	113	27
Farmer	30	7.2
Housewife	159	38
Daily laborer	25	6
Unemployed	26	6.2
<i>Residence</i>		
Rural	54	12.9
Urban	364	87.1
<i>Social support</i>		
High level of social support	66	15.8
Moderate level of social support	329	78.7
Low level of social support	23	5.5

Out of 418 participants, 159 (38%) were housewives and 364 (87.1%) were living in urban areas (Table 1).

3.2. Obstetric Related History of the Respondents. Three hundred and five (73%) of the mothers had a history of planned pregnancy and 394 (94.3%) wanted to be pregnant. Forty-four (10.5%) of the mothers had a history of abortion, 237 (56.7%) of the mothers had a history of multigravidity, and 224 (53.6%) of the mothers had a history of multiparity (Table 2).

TABLE 2: Obstetrics related characteristics of participants in Gondar town, 2015 ($n = 418$).

Variables	Frequency	Percent
<i>Planned pregnancy</i>		
Yes	305	73
No	113	27
<i>Wanted pregnancy</i>		
Yes	394	94.3
No	24	5.7
<i>First ANC initiation</i>		
First trimester	142	34
Second trimester	247	59.1
Third trimester	29	6.9
<i>History of abortion</i>		
Yes	44	10.5
No	374	89.5
<i>Parity</i>		
Nulliparous	194	46.4
Multiparous	224	53.6
<i>Gravidity</i>		
Primigravida	181	43.3
Multigravida	237	56.7

3.3. Prevalence of Domestic Violence. Overall, the prevalence of domestic violence was found to be 25.4%. Of this, the prevalence of psychological, physical, and sexual violence was 24.5%, 8.1%, and 2.4%, respectively. Regarding the frequencies of violence toward each item, 85 (20.3%) of the participants were insulted/made feel bad about themselves (Table 3).

3.4. Factors Associated with Domestic Violence. From the bivariate analysis, variables that have p value < 0.2 such as marital status, educational status, employment, residence, social support, unplanned pregnancy, late ANC initiation, history of abortion, parity, and gravidity were entered into multivariable analysis. From the multivariable analysis, primary educational status (AOR = 4.59, CI: 1.496, 14.070), rural residency (AOR = 5.53, CI: 2.311, 13.249), unplanned pregnancy (AOR = 4.34, CI: 2.345, 8.020), and first ANC initiation (AOR = 5.41, CI: 1.493, 19.696) were factors significantly associated with domestic violence at p value < 0.05 (Table 4).

4. Discussion

In this cross-sectional study, the overall prevalence of domestic violence was found to be 25.4%, associated with lower educational status, rural residency, unplanned pregnancy, and late ANC initiation. Out of the overall prevalence of 25.4%, 24.5% was emotional violence, 8.1% was physical violence, and 2.4% was sexual violence. This result (25.4%) is similar to the studies carried out in Uganda (27.7%) [17] and Nigeria (28.3%) [18], but lower compared to the studies carried out in Zimbabwe (61.3%) [19], Rwanda (35.1%) [20], South Africa (31%) [21] Nigeria (34.3%) [22], and Kenya (37%) [23] and the

TABLE 3: Frequencies of domestic violence toward each item of WHO tools in Gondar town, 2015 ($n = 418$).

Violence items	Frequency	Percent
<i>Psychological violence</i>	103	24.5
Insulted/made feel bad about self	85	20.3
Belittled or humiliated in front of other people	26	6.2
Scared or intimidated on purpose	76	18.2
Threatened when asking friends/family	15	3.6
<i>Physical violence</i>	34	8.1
Slapped you or thrown something at you that could hurt you?	31	7.7
Pushed you or shoved or pulled your hair?	11	2.6
Hit you with his fist or with something else that could hurt you?	15	3.6
Kicked or dragged you or beat you	2	0.5
Choked or burnt you on purpose?	1	0.2
Threatened to use or actually used a gun, knife, or any other weapon against you?	2	0.5
<i>Sexual violence</i>	10	2.4
Physically forced you to have sexual intercourse	5	1.2
Having unwanted sexual intercourse because of fear from the partner	7	1.7
Forced you to do something sexual that is degrading or humiliating	1	0.2
<i>Overall violence</i>	106	25.4

studies conducted in Ethiopia (32.2% [11] and 44.5% [12]). In contrast, the prevalence of domestic violence in this study is higher than in the studies carried out in America (16.8%) [24] and Nigeria (11.6% [25] and 7.4% [26]). The possible explanation for the variation may be due to the difference in educational level, accessibility of information on gender based issues, reproductive health information, the studies design, geographical areas, and the cultures of the study subjects.

Regarding the associated factors, those women who had primary educational status [(AOR = 4.59, CI: 1.496, 14.070)] experienced domestic violence more than four times higher compared to those with educational status of college and above. This result is consistent with the previous studies [13, 27]. This might be due to the fact that uneducated pregnant women may not have the ability to have a discussion with their partners to resolve any disagreement. Evidence revealed that low levels of education and lack of decision-making power increase women's likelihood of experiencing domestic violence during pregnancy [9].

Those women who participated in the study from rural residences [(AOR = 5.53, CI: 2.311, 13.249)] experienced domestic violence more than five times higher compared to urban residences. This may be due to the fact that those women who participated in the study from rural residences may not have accessed different information that deals with gender equality, women's right, and violence reduction strategies.

Those women with unplanned pregnancy [(AOR = 4.34, CI: 2.345, 8.020)] experienced domestic violence more than four times higher compared to women with planned pregnancy. This may be due to the fear of taking the responsibility to care for both the mother and the newly coming child or this unplanned pregnancy may be the result of sexual violence.

Studies revealed that sexual violence is one of the causes of unplanned pregnancy [13, 27, 28].

Those women who start their ANC during the third trimesters [(AOR = 5.41, CI: 1.493, 19.696)] experienced domestic violence more than five times higher compared to those that started their ANC during the first trimester. This result is consistent with another study [29]. This may be due to the lower socioeconomic problem and lack of information on the advantage of on-time ANC initiation. This can be supported by other studies [26, 30].

4.1. Limitation of the Study. This study has some important limitations that should be considered when interpreting the results. First the cross-sectional nature of the study design does not confirm definitive cause and effect relationship between dependent and independent variables. Second, there might be recall and social desirability bias due to the sensitive nature of domestic violence and cultural barrier to disclose partners issue to third parties.

4.2. Conclusion and Recommendations. Overall, more than a quarter of the study participants experienced domestic violence. Lower educational status, rural residency, unplanned pregnancy, and late ANC initiation were factors statistically significant with domestic violence. Thus, the authors suggest strengthening the provision of women's reproductive health information since it has advantages for planned pregnancy and time of initiation of ANC.

Disclosure

The funder had no role in study design, data collection, analysis, and decision to publish. The corresponding author

TABLE 4: Factors associated with domestic violence (bivariate and multivariable) analysis in Gondar town, 2015 ($n = 418$).

Explanatory variables	Domestic violence		COR (95% CI)	AOR (95% CI)	p value
	Yes, N (%)	No, N (%)			
<i>Marital status</i>	84 (20.1)	289 (69.1)	1		
Married	22 (5.3)	23 (5.5)	3.33 (1.747, 6.197)		
Unmarried					
<i>Educational status</i>					
Cannot read and write	41 (9.8)	61 (14.6)	10.34 (4.124, 25.752)	1.40 (0.454, 4.329)	0.557
Primary	31 (7.4)	45 (14.6)	10.56 (4.109, 27.151)	4.59 (1.496, 14.070)	0.008
Secondary	28 (6.7)	114 (10.8)	3.77 (31.496, 9.484)	2.10 (0.706, 6.210)	0.183
College and above	6 (1.4)	92 (22)	1	1	1
<i>Employment</i>					
Government	7 (1.7)	58 (13.9)	1		
Merchant	19 (4.5)	94 (22.5)	1.23 (0.417, 3.615)		
Farmer	24 (5.7)	6 (1.4)	2.28 (0.814, 6.380)		
Housewife	31 (7.4)	128 (30.6)	33.14 (10.086, 13.908)		
Daily laborers	15 (3.6)	10 (2.4)	2.01 (0.835, 4.823)		
Unemployed	10 (2.4)	16 (3.9)	3.68 (1.222, 7.801)		
<i>Residency</i>					
Rural	31 (7.4)	23 (5.5)	5.19 (2.861, 9.427)	5.53 (2.311, 13.249)	<0.003
Urban	75 (17.9)	289 (69.1)	1	1	1
<i>Social support</i>					
High social support	14 (3.3)	52 (12.4)	1		
Moderate social support	84 (20.1)	245 (58.6)	1.27 (0.417, 3.615)		
Low social support	9 (2.1)	14 (3.4)	2.39 (0.814, 6.380)		
<i>Planned pregnancy</i>					
Yes	38 (9.1)	267 (63.9)	1	1	1
No	68 (16.3)	45 (10.8)	10.62 (6.393, 17.633)	4.34 (2.345, 8.020)	<0.001
<i>First ANC</i>					
First trimester	13 (3.1)	129 (30.9)	1	1	1
Second trimester	73 (17.5)	174 (41.6)	4.16 (2.212, 7.836)	6.23 (0.483, 9.696)	0.112
Third trimester	20 (18.9)	9 (2.9)	22.05 (8.345, 58.268)	5.41 (4.345, 15.268)	0.011
<i>Abortion</i>					
Yes	19 (4.5)	25 (6)	2.51 (0.210, 0.759)		
No	87 (20.8)	287 (68.7)	1		
<i>Parity</i>					
Nulliparous	34 (8.1)	160 (38.3)	0.45 (0.282, 0.714)		
Multiparous	72 (17.2)	152 (36.4)	1		
<i>Gravidity</i>					
Primigravida	30 (7.2)	151 (36.1)	0.42 (0.261, 0.678)		
Multigravida	76 (18.2)	161 (38.5)	1		

had full access to all the data in the study and had final responsibility for the decision to prepare the manuscript and submit for publication.

Conflicts of Interest

The authors declare that there are no conflicts of interest.

Authors' Contributions

Berhanu Boru Bifttu was responsible for the manuscript from its conception and analysis and interpretation of data and drafted the manuscript. Berihun Assefa Dachew participated in data analysis and commented on and drafted the manuscript. Bewket Tadesse Tiruneh participated in data analysis and interpretation and review of the manuscript.

Abarham Zeleke Zewoldie participated in data analysis and review of the manuscript.

Funding

The funding of this paper was covered by the University of Gondar College of Medicine and Health Sciences.

Acknowledgments

The authors would like to thank the University of Gondar College of Medicine and Health Sciences for the inspiration, motivation, and financial support to conduct this research. They would also like to thank the study subjects for their willingness to participate in the study. Last but not least, heartfelt thanks are due to the supervisors and data collectors.

References

- [1] U. Nations, "Beijing declaration and platform for action. Paper presented at the Fourth World Conference on Women: Action for Equality, Development and Peace," Beijing, 1995.
- [2] WHO, *Multi County Study on Women's Health and Domestic Violence Against Women: Initial Results on Prevalence, Health Outcomes and Women's Responses*, WHO, Geneva, 2005.
- [3] T. L. Taillieu and D. A. Brownridge, "Violence against pregnant women: Prevalence, patterns, risk factors, theories, and directions for future research," *Aggression and Violent Behavior*, vol. 15, no. 1, pp. 14–35, 2010.
- [4] M. Pourasadi and M. Hashemi, "Phenomenon of divorce and custody of children after separation," *Biquarterly of Studies of Woman Police*, vol. 6, no. 16, pp. 54–81, 2012.
- [5] C. Garcia-Moreno, H. A. Jansen, M. Ellsberg, L. Heise, and C. H. Watts, "Prevalence of intimate partner violence: findings from the WHO multi-country study on women's health and domestic violence," *The Lancet*, vol. 368, no. 9543, pp. 1260–1269, 2006.
- [6] S. Shamu, N. Abrahams, M. Temmerman, A. Musekiwa, and C. Zarowsky, "A systematic review of African studies on intimate partner violence against pregnant women: Prevalence and risk factors," *PLoS ONE*, vol. 6, no. 3, Article ID e17591, 2011.
- [7] Survey CSAEaOMEdah, *Central Statistical Agency and ORC Macro*, Ethiopia, Addis Ababa, Ethiopia, 2011.
- [8] Central Statistical Agency (CSA), *Ethiopia Demographic and Health Survey: Key Indicators Report Addis Ababa, Ethiopia, and Rockville, Maryland, USA, CSA and ICF*, 2016.
- [9] S. G. Abeya, M. F. Afework, and A. W. Yalew, "Intimate partner violence against women in western Ethiopia: prevalence, patterns, and associated factors," *BMC Public Health*, vol. 11, article 913, 2011.
- [10] Y. Gossaye, N. Deyessa, Y. Berhane et al., "Butajira Rural Health Program: Women's Health and Life Events Study in Rural Ethiopia," *Ethiopian Journal of Health Development*, vol. 17, no. 5, 2004.
- [11] T. Yimer, T. Gobena, G. Egata, and H. Mellie, "Magnitude of Domestic Violence and Associated Factors among Pregnant Women in Hulet Ejjju Enessie District, Northwest Ethiopia," *Advances in Public Health*, vol. 2014, pp. 1–8, 2014.
- [12] B. Abebe Abate, B. Admassu Wossen, and T. Tilahun Degfie, "Determinants of intimate partner violence during pregnancy among married women in Abay Chomen district, Western Ethiopia: A community based cross sectional study," *BMC Women's Health*, vol. 16, no. 1, article no. 16, 2016.
- [13] Z. Y. Kassa and A. W. Menale, "Physical violence and associated factors during pregnancy in Yirgalem town, South Ethiopia," *Current Pediatric Research*, vol. 20, no. 1-2, pp. 37–42, 2016.
- [14] Secretary TWHOOtP, *Presidential Memorandum – Establishing a Working Group on the Intersection of HIV/AIDS, Violence Against Women and Girls, and Gender-Related Health Disparities*, Establishing- Working-Group-Intersection-HIV/AIDS, 2015, <https://www.whitehouse.gov/the-press-office/2012/03/30/presidential-memorandum>.
- [15] D. H. McCree, L. J. Koenig, K. C. Basile, D. Fowler, and Y. Green, "Addressing the intersection of HIV and intimate partner violence among women with or at risk for HIV in the United States," *Journal of Women's Health*, vol. 24, no. 5, pp. 331–335, 2015.
- [16] G. D. Zimet, S. S. Powell, G. K. Farley, S. Werkman, and K. A. Berkoff, "Psychometric characteristics of the multidimensional scale of perceived social support," *Journal of Personality Assessment*, vol. 55, no. 3-4, pp. 610–617, 1990.
- [17] D. K. M. Kaye, G. Bantebya, A. Johansson, and A. M. Ekstrom, "Domestic violence during pregnancy and risk of low birth weight and maternal complications: a prospective cohort study at Mulago Hospital, Uganda," *Tropical Medicine & International Health*, vol. 11, pp. 1576–1584, 2006.
- [18] B. Olagbuji, M. Ezeanochie, A. Ande, and E. Ekaete, "Trends and determinants of pregnancy-related domestic violence in a referral center in southern Nigeria," *International Journal of Gynecology and Obstetrics*, vol. 108, no. 2, pp. 101–103, 2010.
- [19] S. Shamu, N. Abrahams, C. Zarowsky, T. Shefer, and M. Temmerman, "Intimate partner violence during pregnancy in Zimbabwe: A cross-sectional study of prevalence, predictors and associations with HIV," *Tropical Medicine & International Health*, vol. 18, no. 6, pp. 696–711, 2013.
- [20] J. Ntaganira, A. S. Muula, F. Masaisa, F. Dusabeyezu, S. Siziya, and E. Rudatsikira, "Intimate partner violence among pregnant women in Rwanda," *BMC Women's Health*, vol. 8, article 17, 2008.
- [21] M. Hoque MEH and S. Kader, "Prevalence and experience of domestic violence among rural pregnant women in KwaZulu-Natal, South Africa," *Southern African Journal of Epidemiology & Infection*, vol. 24, no. 4, pp. 34–37, 2009.
- [22] A. Ashimi and T. Amole, "Prevalence and predictors for domestic violence among pregnant women in a rural community Northwest, Nigeria," *Nigerian Medical Journal*, vol. 56, no. 2, p. 118, 2015.
- [23] L. A. Makayoto, J. Omolo, A. M. Kamweya, V. S. Harder, and J. Mutai, "Prevalence and associated factors of intimate partner violence among pregnant women attending Kisumu District Hospital, Kenya," *Maternal and Child Health Journal*, vol. 17, no. 3, pp. 441–447, 2013.
- [24] E. Valladares, R. Peña, L. Á. Persson, and U. Högberg, "Violence against pregnant women: Prevalence and characteristics. A population-based study in Nicaragua," *BJOG: An International Journal of Obstetrics & Gynaecology*, vol. 112, no. 9, pp. 1243–1248, 2005.
- [25] A. N. I. Gyuse and A. P. Ushie, "Pattern of domestic violence among pregnant women in Jos, Nigeria," *South African Family Practice*, vol. 51, no. 4, pp. 343–345, 2009.
- [26] Z. Iliyusu, I. S. Abubakar, H. S. Galadanci, Z. Hayatu, and M. H. Aliyu, "Prevalence and Risk Factors for Domestic Violence Among Pregnant Women in Northern Nigeria," *Journal of Interpersonal Violence*, vol. 28, no. 4, pp. 868–883, 2013.
- [27] M. Salazar and M. San Sebastian, "Violence against women and unintended pregnancies in Nicaragua: A population-based multilevel study," *BMC Women's Health*, vol. 14, no. 1, article no. 26, 2014.
- [28] C. C. Pallitto, C. Garcia-Moreno, H. A. F. M. Jansen, L. Heise, M. Ellsberg, and C. Watts, "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*, vol. 120, no. 1, pp. 3–9, 2013.
- [29] N. Thananowan and S. M. Heidrich, "Intimate partner violence among pregnant thai women," *Violence Against Women*, vol. 14, no. 5, pp. 509–527, 2008.
- [30] K. Birmeta, Y. Dibaba, and D. Woldeyohannes, "Determinants of maternal health care utilization in Holeta town, central Ethiopia," *BMC Health Services Research*, vol. 13, article 256, 2013.



Hindawi
Submit your manuscripts at
<https://www.hindawi.com>

