

Factors Associated with Intimate Partner Violence and the Utilization of Maternal Health Services: Findings from Nepal Demographic Health Survey 2016.

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ABSTRACT

Background: Intimate partner violence (IPV) is a public health problem globally and is most common in developing countries. IPV affects more than one-fourth of all women of reproductive age [WRA]. It is most critical during pregnancy. IPV not only affects physical and mental well-being but also leads to negative consequences with birth outcomes. The paper aims to find out the association between background characteristics of participants, IPV, and utilization of maternal health services.

Methods: We conducted a secondary data analysis of the Nepal Demographic and Health Survey 2016 to assess the association between IPV and maternal service utilization: ANC visits and institutional delivery. Altogether 1374 WRA were randomly selected. Background characteristics of the WRA and those who experienced IPV were the independent variables and ANC visits and institutional delivery were the dependent variables.

Results: Data showed that 26 percent of the WRA had faced at least one form of IPV, 68 percent had visited health facilities at least four times for ANC check-ups during pregnancy, and the rate of institutional delivery was 61 percent. There were associations among IPV with ANC visits and institutional delivery ($p < 0.001$). Age group, educational level, ethnicity, number of children, residence setting, and wealth status of the WRA were significantly associated with ANC visits and institutional delivery ($p < 0.001$).

Conclusions: IPV, educational level, and socio-economic status of WRA were significant predictors for maternal health service utilization. Policymakers should incorporate these significant predictors during planning and intervention programs as well.

Keywords: ANC visits, intimate partner violence, maternal health service utilization, Nepal Demographic and Health Survey, place of delivery

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INTRODUCTION

Violence, whether from intimate partners or from others, has a significant negative impact on public health. But intimate partner violence [IPV] is a most critical negative influence on public health since it is most common, affecting a disproportionate number of women in Nepal. There are different forms of IPV: physical, mental, psychological or mixed forms.¹ IPV not only creates physical problems and injuries, but also can lead to mental disorders, homicides and even suicides.² For example, a large body of evidence shows that IPV is strongly associated with mental disorders in women.³ Women are at more risk of being exposed to IPV during pregnancy.⁴ Physical consequences such as a low birth weight, premature birth, birth with disabilities, miscarriage, and perinatal mortality are some examples of important health outcomes that are related to IPV. Some studies suggest that IPV is a predisposing factor for delinquent, hyperactivity, aggressiveness, anti-social behaviours, anxiety, depression, as well as somatic symptoms for children if their mothers faced any form of violence during pregnancy.² Nearly 15 percent of the total number of pregnancies reported to be unintended are due to IPV.⁵ Another study shows that more than one third (37%) of the participants reported that they had faced some type of IPV during their lifetime.^{6,7} A study from Uganda shows that women having disabilities were more vulnerable to IPV compared to women without disabilities.⁸ IPV not only persists with community members, but also with university students too.⁹

It was noticed that nearly one third of women aged 15 years and older have experienced IPV during their lifetime globally, and nearly two-thirds of the women in East Asia have experienced IPV.¹⁰ IPV during pregnancy leads to negative consequences not only for the mother but also affects children, general women's health, and the economy.¹¹ It is claimed that the cost of IPV is five percent of the total gross domestic product [GDP].¹²

The sustainable development goal number five incorporates achieving gender equality and empowering all women and girls, and the sustainable development goals number 5.1 and 5.2 have recommended ending and eliminating all kind of violence and discrimination against women and girls.¹³ Similarly, the Constitution of Nepal has also declared eliminating all kinds of discrimination and violence against women and children to be a national goal.¹⁴ Studies show that there are associations between IPV and difficulties with breast feeding that ultimately negatively affects child health.¹⁵ Furthermore, IPV against pregnant women is likely to lead to depressive symptoms, anxiety, a low level of attachment with infants, and problems with breast feeding.⁴ Moreover, IPV leads to serious problems with pregnancy as well as with birth outcomes that ultimately negatively affects the gross domestic product and the national economy as well.¹⁶

Very few research studies have been conducted concerning IPV and its consequences for women's health as well as for utilization of maternal health services which are provided free of cost from government health facilities. This paper aims to fill these research gap by examining the associations among background characteristics of participants, IPV, and utilization of maternal health services, especially ANC visits and institutional delivery.

MATERIALS AND METHODS

This study involves a secondary analysis of data from the Nepal Demographic and Health Survey [NDHS] 2016 to assess the associations among background characteristics of women who have had live births within five-years of the NDHS, 2016; intimate partner violence; and utilization of maternal services. So, participants in the study were mothers who had live births within the five-years preceding the survey. The NDHS is a nationally representative household-based survey conducted from 19th June 2016 to 31st January 2017. The NDHS 2016 administration was the fifth survey of this type conducted and the main objectives of the NDHS 2016 was to provide up-to-date estimates of basic demographic and health indicators.¹⁷ Details of methods can be obtained from NDHS 2016 report that is freely available.

This study analysed four or more visits for antenatal care [ANC], and delivery at health facilities as dependent variables with IPV with and socio-demographic background characteristics as independent variables (such as age group, educational status, ethnicity, number of children, religion, women's autonomy for household decision, residence setting, employment status, wealth status). The dependent variables were categorized into two attributes for each i.e. (i) less than four ANC visits; and equal or more than four ANC visits; and (ii) delivery at home; and deliveries at health facilities for the variables: ANC visits and place of delivery respectively. We merged or manipulated some attributes of the variables due to poor responses to make meaningful the bivariate and multivariate analyses.

The NDHS was designed to represent the national population of women aged 15-49 years of age. Altogether, a sample of 12,862 respondents from this reproductive age group of women were selected based on national household census data from 2011. Among them only 1,374 mothers were included who had most recent live births in the five-years preceding the NDHS 2016. Univariate [frequency and percentage], bivariate [chi-square test], and multivariate [binary logistic regression] were performed to assess the results. We used the statistical package for social science [IBM SPSS Statistics 20] for statistical analysis.

RESULTS

Of the participants, nine out of ten were less than 35 years of age. Among the participants, 49 percent were from 25 to 34 years of age, 41 percent were less than

25 years of age, and the rest of the respondents were more than 34 years of age. More than one third (34%) were from indigenous groups (Adibasis/Janajatis), 28% were from Brahmin/Chhetri and the rest of the respondents were from Dalit and other castes of Nepal. Forty-three percent of the participants were from poor economic backgrounds; 21% had middle wealth status, whereas 37% had rich wealth status. Nearly 22% of the participants had experienced physical violence; 13% faced emotional violence; 8% faced sexual violence; and more than one fourth had faced some kind of violence from their husbands/partners. Details of the respondents have been presented on table 1.

Experiences of violence and utilization of maternal health service:

There was a negative association found between experience of violence and utilization of maternal health services. Seventy-one percent of the participants who did not face physical violence during pregnancy had visited health facilities for ANC check-ups more than four times whereas just 57% of the participants, who had faced physical violence, visited health facilities for ANC check-ups four or more times during pregnancy (which was statistically significant) ($p < 0.001$). Similarly, only 57% of the mothers who faced emotional violence had visited health care facilities four or more times for ANC check-ups compared to 70% who visited health care facilities for ANC check-ups four or more times who did not face emotional violence ($p < 0.001$). In the same way, only 55% of the participants who had faced sexual violence, had four or more ANC visits compared to 69% of those who reported four or more ANC visits during pregnancy. The majority of the participants (72%), who did not experience any kind of violence from partners had visited health facilities four or more times for ANC compared to 58 percent for those who had faced at least one violence from partners ($p < 0.001$).

Data showed that institutional delivery was influenced by women's experience of any type of violence. A significantly lower percentage of women ($p < 0.001$) who faced physical violence had utilized delivery services (49%) from health care facilities compared to those who did not face physical violence (65%). Similarly, the same results were observed from those women who experienced any type of violence and delivery at health care facilities. Sixty-four and 52% of deliveries were conducted in health care facilities for those women who did not experience any kind of violence and those who had experienced at least one instance of violence from intimate partners respectively ($p < 0.001$). Socio-demographic or background characteristics also influenced the number of ANC visits and institutional delivery (Table 2).

Adjusted odds ratios for utilization of maternal health services

Data showed that participants who faced at least one form of violence from partners were less likely to receive four or more ANC check-ups visits compared to women with no experience of violence from partners (aOR =

0.74, CI [0.56 – 0.98], $p < 0.05$). Similarly, participants who had experienced at least one form of violence were less likely to receive delivery services at health care facilities (aOR = 0.80, CI [0.60 – 0.90], $p < 0.05$). Educational status was a significant predictor for both number of ANC visits and institutional delivery.

DISCUSSION

Results showed that more than one fourth of the women who had their last birth within the past five-year preceding when the NDHS 2016 was conducted faced at least one act of violence from their partners. Nearly one third of them did not have at least four ANC check-up visits and more than one third had experienced delivery at home. Data showed that higher numbers of acts of violence was associated with lower rates of maternal health care service utilization. Similarly, higher age of women was associated with lower utilization of maternal health services. Higher education status was associated with higher utilization of ANC check-ups and natal care. Data showed that women having more children was associated with lower utilization of maternal health care services. Urban women were more likely to utilize maternal health care services compared to those women who live in rural areas. Interestingly, employed women were more likely to utilize ANC check-up services but were less likely to utilize of delivery services from health care facilities. Multivariate analyses showed that younger rather than older women, educated rather than uneducated women, women from Brahmin and Chhetri castes rather than other castes, women from urban rather than rural areas, and richer rather than poorer women were more likely to utilize maternal health care services available at free of cost at government and other health facilities.

One fourth of the participants had faced at least one act of violence from partners in Nepal, but nearly three fourths of the pregnant women had faced at least one form of IPV during their current pregnancy in Iran⁴ which is three folds compared to Nepal but more than one third from the US have had an experience of IPV which was similar to Nepal in terms of IPV rate.¹⁶

A study shows that 29 percent of pregnant mothers had faced at least one type of IPV during their pregnancy.¹⁸ It was observed that about 23 percent of women had faced IPV during their pregnancy in Ethiopia.¹⁹ So, it can be concluded that nearly one fourth of the mothers in these countries have also confronted IPV during their pregnancies. In the same ways, these studies also support the results that IPV during pregnancy was associated with low utilization of maternal health care services.¹⁸ A study from Wuhan, China also showed that IPV was associated with prenatal depression that leads to adverse birth outcomes.²⁰

Some controversial statements were observed that elder women were more vulnerable for IPV and their later life can be complex²¹ but this study showed that younger women were more vulnerable than older women. So, type and magnitude of IPV and its effects may be different in different socio-geographical

Table 1: Background characteristics of participants (married women)

Variables	Category	Percent (%)	Frequency
Age group	Less than 25 years	40.7	559
	25-34	48.6	668
	35 or above	10.7	147
Education	No education	31.8	437
	Primary	19.7	270
	Secondary or above	48.5	667
Ethnicity	<i>Brahmin/Chhetri</i>	28.2	388
	<i>Janajatis</i>	34.0	467
	<i>Dalit</i>	14.6	201
	Other	23.2	318
Total Children	None/one	35.8	492
	Two	32.3	443
	Three	15.0	206
	Four or more	16.9	233
Religion	<i>Hindu</i>	85.9	1180
	<i>Buddhist</i>	4.8	65
	<i>Islam</i>	6.1	84
	<i>Kirat/Christian</i>	3.2	44
Women's autonomy in household decision	No autonomy	33.4	458
	Moderate autonomy (involved in 1-2 issues)	34.2	470
	High autonomy (involved in all 3 issues)	32.4	445
Place of residence	Urban	53.6	736
	Rural	46.4	637
Currently working	No	46.8	643
	Yes	53.2	731
Wealth index	Poor	42.7	587
	Middle	20.6	283
	Rich	36.7	504
Physical violence by husband/partner	No	78.2	1074
	Yes	21.8	300
Emotional violence by husband/partner	No	87.4	1201
	Yes	12.6	173
Sexual violence by husband/partner	No	92.2	1266
	Yes	7.8	108
At least one violence from husband	No	74.4	1022
	Yes	25.6	352
Number of ANC visits for the most recent live birth in the five-year preceding the survey	Less than 4 visit	31.7	436
	4 or more visits	68.3	938
Place of delivery for the most recent live birth in the five-year preceding the survey	Home	38.8	533
	Health facilities	61.2	841
Total		100.0	1374

Table 2: Experience of violence and maternal health service utilization

Variables	ANC visits ^a	Place of delivery ^{aa}	Total
	<4 visits	Home	% N
Experience of violence			
Physical violence	$\chi^2 = 22.1, p < 0.001$	$\chi^2 = 26.4, p < 0.001$	
No	28.6	71.4	100.0 1074
Yes	42.9	57.1	100.0 300
Emotional violence	$\chi^2 = 12.3, p < 0.001$	$\chi^2 = 6.2, p = 0.013$	
No	30.1	69.9	100.0 1201
Yes	43.3	56.7	100.0 173
Sexual violence	$\chi^2 = 9.9, p = 0.002$	$\chi^2 = 0.188, p = 0.665$	
No	30.6	69.4	100.0 1266
Yes	45.2	54.8	100.0 108
At least one violence from husband	$\chi^2 = 20.7, p < 0.001$	$\chi^2 = 16.8, p < 0.001$	
No	28.4	71.6	100.0 1022
Yes	41.6	58.4	100.0 352
Socio-demographic characteristics			
Age group	$\chi^2 = 19.6, p < 0.001$	$\chi^2 = 18.3, p < 0.001$	
Less than 25 years	26.9	73.1	100.0 559
25-34	32.7	67.3	100.0 668
35 or above	45.9	54.1	100.0 147
Education	$\chi^2 = 140.5, p < 0.001$	$\chi^2 = 162.5, p < 0.001$	
No education	51.3	48.7	100.0 437
Primary	35.4	64.6	100.0 270
Secondary or above	17.5	82.5	100.0 667
Ethnicity/Caste	$\chi^2 = 46.3, p < 0.001$	$\chi^2 = 30.3, p < 0.001$	
Brahmin/Chhetri	21.2	78.8	100.0 388
Janajatis	30.1	69.9	100.0 467
Dalit	35.4	64.6	100.0 201
Other	44.7	55.3	100.0 147
Number of children	$\chi^2 = 152.5, p < 0.001$	$\chi^2 = 168.7, p < 0.001$	
None/one	17.8	82.2	100.0 492
Two	28.1	71.9	100.0 443
Three	37.8	62.2	100.0 206
Four or more	62.8	37.2	100.0 233
Religion	$\chi^2 = 8.8, p = 0.032$	$\chi^2 = 6.1, p = 0.103$	
Hindu	31.2	68.8	100.0 1180
Buddhist	25.2	74.8	100.0 65
Islam	45.6	54.4	100.0 84
Kirat/Christian	29.1	70.9	100.0 44
Women's autonomy in household decision	$\chi^2 = 4.3, p = 0.116$	$\chi^2 = 3.5, p = 0.173$	
No autonomy	34.7	65.3	100.0 458
Moderate autonomy (involved in 1-2 issues)	32.1	67.9	100.0 470
High autonomy (involved in all 3 issues)	28.3	71.7	100.0 445
Place of residence	$\chi^2 = 30.9, p < 0.001$	$\chi^2 = 48.7, p < 0.001$	
Urban	25.2	74.8	100.0 736
Rural	39.3	60.7	100.0 637
Currently working	$\chi^2 = 4.8, p = 0.028$	$\chi^2 = 9.2, p = 0.002$	
No	34.7	65.3	100.0 643
Yes	29.2	70.8	100.0 731
Wealth index	$\chi^2 = 55.9, p < 0.001$	$\chi^2 = 146.3, p < 0.001$	
Poor	40.6	59.4	100.0 587
Middle	34.7	65.3	100.0 283
Rich	19.8	80.2	100.0 504
Total	31.7	68.3	100.0 1374

Note: a = number of ANC visits for the most recent live birth in the five-year preceding the survey; aa = place of delivery for the most recent live birth in the five-year preceding the survey.

contexts. A study from Ethiopia showed that low birth weight and pre-term birth were associated with IPV.^{19,22} So, IPV not only influences the mother but also affects birth outcomes too in Ethiopia. Exposure to any form of violence appears to lead to barriers to maternal health service utilization.²³

Employment has been found to be a predictor for IPV during pregnancy. A study conducted in New York City showed that 79 percent of the unemployed respondents were victimized by IPV. In the same way, higher education has been associated with lower levels of IPV which supports the findings in this study.²⁴ Previous research also supports that younger age and poorer financial status were associated with IPV during pregnancy as observed by Doi et al. Another study showed that poverty, lack of education and food security is associated with IPV during and after pregnancy.^{25,26} Appropriate interventions have been shown to help minimize and control IPV as various experiments demonstrated this in several countries.²⁷

An IPV reduces utilization of maternal health services by 25 and 20 percent in ANC visits and delivery

Table 3: Adjusted odds ratios (aOR) for maternal health services (4th ANC visit and delivered at health facility) for the last birth within the past five-year by selected predictors

Selected predictors	aOR [95%CI]	p value	aOR [95%CI]	p value
Experience of violence				
Violence from husbands/partners (at least one form)				
No (ref)	1.00		1.00	
Yes	0.74[0.56-0.99]	0.039	0.80[0.60-1.06]	0.125
Socio-demographic characteristics				
Age group				
Less than 25 years (ref)	1.00		1.00	
25-34	0.82[0.62-1.09]	0.824	0.68[0.52-0.89]	0.007
35 or above	0.58[0.38-0.91]	0.583	0.89[0.57-1.39]	0.608
Education				
No education (ref)	1.00		1.00	
Primary	1.62[1.16-2.26]	0.005	1.68[1.20-2.35]	0.003
Secondary or above	3.03[2.17-4.22]	<0.001	3.10[2.24-4.29]	<0.001
Ethnicity				
Brahmin/Chhetri (ref)	1.00		1.00	
Janajatis	0.59[0.42-0.85]	0.004	0.64[0.45-0.90]	0.011
Dalit	0.75[0.50-1.15]	0.190	0.76[0.50-1.14]	0.184
Other	0.46[0.30-0.71]	<0.001	0.38[0.24-0.59]	<0.001
Religion				
Hindu (ref)	1.00		1.00	
Buddhist	1.86[0.97-3.56]	0.062	1.08[0.59-2.00]	0.801
Islam	1.07[0.62-1.83]	0.814	1.16[0.68-2.04]	0.543
Kirat/Christian	1.27[0.62-2.60]	0.511	1.97[0.94-4.15]	0.074
Women's autonomy in household decision				
No autonomy (ref)	1.00		1.00	
Moderate autonomy (involved in 1-2 issues)	0.88[0.65-1.19]	0.399	1.08[0.80-1.46]	0.630
High autonomy (involved in all 3 issues)	1.14[0.83-1.56]	0.417	1.07[0.78-1.46]	0.694
Place of residence				
Urban (ref)	1.00		1.00	
Rural	0.72[0.56-0.93]	0.012	0.68[0.53-0.88]	0.003
Currently working				
No (ref)	1.00		1.00	
Yes	1.46[1.11-1.91]	0.006	0.79[0.60-1.03]	0.081
Wealth index				
Poor (ref)	1.00		1.00	
Middle	1.77[1.25-2.51]	0.001	3.06[2.16-4.33]	<0.001
Rich	2.53[1.82-3.52]	<0.001	4.41[3.18-6.11]	<0.001
Constant	1.437		1.06	
Cox & Snell R Square	0.146		0.204	
-2 Log likelihood	1500.5		1521.3	

Note: ref = reference category

services by skilled health workers respectively.²⁸ Similarly, another SRMA from Ethiopia showed that women's and partners' educational status, as well as partners' alcohol use were significant predictors for IPV.²⁹ It was noticed that nearly the same results that so called 'low caste', women's employment, income, inadequate marital discussion were associated with IPV³⁰ but another study showed that IPV was not associated with modern contraceptive use.³¹ All these studies support the present study and it can be concluded that IPV is significantly associated with maternal health services utilization.

Limitation: Health index was categorized as per proxy measures of household's assets as stated by the participants. Results of the study might be influenced by recall bias due to respondents' reported information. The cross-sectional design was used to analyse the quantitative data of NDHS 2016 therefore causality of factors associated with IPV could not be established.

CONCLUSION

Data and evidence from the current study and from a review of the literature show that IPV is a significant predictor for the utilization of health services during pregnancy. Therefore, clinical, educational, legal as well as motivational interventions should be planned and implemented to overcome violence by intimate partners. Intervention programmes should focus on assisting women who face violence from their intimate partners, women over 25 years of age, with limited education, from

Janajatis, Dalit and other castes, rural and poor women since they appear to be more vulnerable compared to other women in Nepal.

REFERENCES

- Chisholm CA, Bullock L, Ferguson JE (Jef). Intimate partner violence and pregnancy: Epidemiology and impact. *Am J Obstet Gynecol*. 2017;217(2):141–4. <https://doi.org/10.1016/j.ajog.2017.05.042> [CrossRef] [PubMed]
- Silva EP, Lemos A, Andrade CHS, Ludermitr AB. Intimate partner violence during pregnancy and behavioral problems in children and adolescents : A meta-analysis. *J Pediatr (Rio J)*. 2018;94(5):471–82. <https://doi.org/10.1016/j.jped.2018.01.007> [CrossRef] [PubMed]
- Santos AG dos, Monteiro CF de S. Domains of common mental disorders in women reporting intimate partner violence. *Rev Lat Am Enfermagem*. 2018;26(e3099). <https://doi.org/10.1590/1518-8345.2740.3099> [CrossRef] [GoogleScholar] [PubMed]
- Moghaddam V, Toohill J, Akaberi A, Hashemiasl B. Influence of intimate partner violence during pregnancy on fear of childbirth. *Sex Reprod Healthc*. 2017;14:17–23. <https://doi.org/10.1016/j.srhc.2017.09.001> [CrossRef] [GoogleScholar] [PubMed]
- Martin-de-las-heras S, Velasco C, Dios J De, Martin A. Unintended pregnancy and intimate partner violence around pregnancy in a population-based study. *Women and Birth*. 2015;28(2):101–5. <https://doi.org/10.1016/j.wombi.2015.01.003> [CrossRef] [GoogleScholar] [PubMed]
- Neset MB, Lara-cabrera ML, Dalsbø TK, Pedersen SA, Bjørngaard JH, Palmstierna T. Cognitive behavioural group therapy for male perpetrators of intimate partner violence: A systematic review. *BMC Psychiatry*. 2019;19(11):1–13. <https://doi.org/10.1186/s12888-019-2010-1> [CrossRef] [GoogleScholar] [PubMed]
- Yakubovich AR, Heron J, Feder G, Fraser A, Humphreys DK. Intimate partner violence victimisation in early adulthood : Psychometric properties of a new measure and gender differences in the Avon longitudinal study of parents and children. *BMJ Open*. 2019;9(e025621). <https://doi.org/10.1136/bmjopen-2018-025621> [CrossRef] [GoogleScholar] [PubMed]
- Valentine A, Akobirshoev I, Mitra M. Intimate partner violence among women with disabilities in Uganda. *Int J Environ Res Public Health*. 2019;16(947):1–13. <https://doi.org/10.3390/ijerph16060947> [CrossRef] [GoogleScholar] [PubMed]
- García-díaz V, Fernández-feito A, Bringas-molleda C, Rodríguez-díaz FJ, Lana A. Tolerance of intimate partner violence and sexist attitudes among health sciences students from three Spanish universities. *Gac Sanit*. 2019;(xx):1–7. <https://doi.org/10.1016/j.gaceta.2019.01.003> [CrossRef] [GoogleScholar] [PubMed]
- Signorelli MC, Hillel S, Oliveira DC De, Paulina B, Quintanilla A, Hegarty K, et al. Voices from low-income and middle-income countries : a systematic review protocol of primary healthcare interventions within public health systems addressing intimate partner violence against women. *BMJ Open*. 2018;8:1–8. <https://doi.org/10.1177/0973408214538584> [CrossRef]
- Doi S, Fujiwara T, Isumi A. Development of the intimate partner violence during pregnancy instrument (IPVPI). *Front Public Heal*. 2019;7(43):1–9. <https://doi.org/10.3389/fpubh.2019.00043> [CrossRef] [GoogleScholar] [PubMed]
- Clark CJ, Ferguson G, Shrestha B, Shrestha PN, Oakes JM, Gupta J, et al. Social norms and women's risk of intimate partner violence in Nepal. *Soc Sci Med*. 2018;202:162–9. <https://doi.org/10.1016/j.socscimed.2018.02.017>
- United Nations. Open working group proposal for Sustainable Development Goals [Internet]. Open Working Group of the General Assembly on Sustainable Development Goals. 2014. (Document A/68/970). <https://doi.org/10.1177/0973408214538584> [CrossRef]
- Nepal Law Commission. The Constitution of Nepal [Internet]. Nepal: Member of Parliament. Nepal; 2015. Available from: <https://www.lawcommission.gov.np/en/wp-content/uploads/2021/01/Constitution-of-Nepal.pdf> [FullText]
- Souza R De, Figueiredo M De, Chaves C, Cristina A, Helena M. Intimate partner violence and breastfeeding practices : a systematic review of observational studies. *J Pediatr (Rio J)*. 2018;94(3):226–37. <http://dx.doi.org/10.1016/j.jped.2017.07.007>
- Bermele C, Andresen PA, Urbanski S. Educating nurses to screen and intervene for intimate partner violence during pregnancy. *Nurs Women's Heal*. 2015;22(1):79–86. <https://doi.org/10.1016/j.nwh.2017.12.006> [CrossRef] [GoogleScholar] [PubMed]
- Ministry of Health, New ERA, ICF. Nepal Demographic and Health Survey 2016 [Internet]. Kathmandu, Nepal: Ministry of Health, Nepal; 2017. www.dhsprogram.com/pubs/pdf/fr336/fr336.pdf. [CrossRef] [FullText]
- Singha JK, Evans-lacko S, Acharya D, Kadel R, Gautam S. Intimate partner violence during pregnancy and use of antenatal care among rural women in southern Terai of Nepal. *Women and Birth*. 2018;31(2):96–102. <https://doi.org/10.1016/j.wombi.2017.07.009> [CrossRef] [GoogleScholar] [PubMed]
- Laelago T, Belachew T, Tamrat M. Effect of

- intimate partner violence on birth outcomes. *Afr Health Sci.* 2017;17(3):681-9. <https://doi.org/10.4314/ahs.v17i3.10> [CrossRef] [GoogleScholar] [PubMed]
20. Yu H, Jiang X, Bao W, Xu G, Yang R, Shen M. Association of intimate partner violence during pregnancy, prenatal depression, and adverse birth outcomes in Wuhan, China. *BMC Pregnancy Childbirth.* 2018;18(469):1-7. <https://doi.org/10.1186/s12884-018-2113-6> [CrossRef] [GoogleScholar] [PubMed]
 21. McGarry J, Ali P, Hinchliff S. Older women, intimate partner violence and mental health: A consideration of the particular issues for health and health care practice. *J Clin Nurs.* 2016. <https://doi.org/10.1111/jocn.13490> [CrossRef] [GoogleScholar] [PubMed]
 22. Berhanie E, Gebregziabher D, Beriuh H, Gereziher A, Kidane G. Intimate partner violence during pregnancy and adverse birth outcomes: A case-control study. *BMC Reprod Heal.* 2019;16(22):1-9. <https://doi.org/10.1186/s12978-019-0670-4> [CrossRef] [GoogleScholar] [PubMed]
 23. Gautam S, Jeong H-S. The role of women's autonomy and experience of intimate partner violence as a predictor of maternal healthcare service utilization in Nepal. *Int J Environ Res Public Health.* 2019;16(895):1-18. <https://doi.org/10.3390/ijerph16050895> [CrossRef] [GoogleScholar] [PubMed]
 24. Thomas JL, Lewis JB, Martinez I, Cunningham SD, Siddique M, Tobin JN, et al. Associations between intimate partner violence profiles and mental health among low-income, urban pregnant adolescents. *BMC Pregnancy Childbirth* [Internet]. 2019;19(120):1-8. <https://doi.org/10.1186/s12884-019-2256-0> [CrossRef] [GoogleScholar] [PubMed]
 25. Hatcher AM, Stockl H, McBride R-S, Khumalo M, Christofides N. Pathways from food insecurity to intimate partner violence perpetration among peri-urban men in South Africa. *Am J Prev Med.* 2019;56(5):765-72. <https://doi.org/10.1016/j.amepre.2018.12.013> [CrossRef] [GoogleScholar] [PubMed]
 26. Ezeudu CC, Akpa O, Waziri NE, Oladimeji A, Adedire E, Saude I, et al. Supplement article Prevalence and correlates of intimate partner violence before and during pregnancy among attendees of maternal and child health services Enugu Nigeria : Mixed method approach , January 2015. 2019;32(Supp 1):1-6. <https://doi.org/10.11604/pamj.supp.2019.32.1.13287> [CrossRef] [GoogleScholar] [PubMed]
 27. Lourenço RG, Fornari LF, Santos DLA dos, Fonseca RMGS da. Community interventions related to intimate partner violence among adolescents : Scope review. *Rev Bras Enferm.* 2019;72(1):277-86. <https://doi.org/10.1590/0034-7167-2018-0586> [CrossRef] [GoogleScholar] [PubMed]
 28. Musa A, Chojenta C, Geleto A, Loxton D. The associations between intimate partner violence and maternal health care service utilization: A systematic review and meta-analysis. *BMC Womens Health.* 2019;19(36):1-14. <https://doi.org/10.1186/s12905-019-0735-0> [CrossRef] [GoogleScholar] [PubMed]
 29. Alebel A, Kibret GD, Wagnew F, Tesema C, Ferede A, Petrucka P, et al. Intimate partner violence and associated factors among pregnant women in Ethiopia: A systematic review and meta-analysis. *Reprod Health.* 2018;15(196):1-12. <https://doi.org/10.1186/s12978-018-0637-x> [CrossRef] [GoogleScholar] [PubMed]
 30. Clark CJ, Ferguson G, Shrestha B, Shrestha PN, Batayeh B, Bergenfeld I, et al. Mixed methods assessment of women ' s risk of intimate partner violence in Nepal. *BMC Womens Health.* 2019;19(20):1-8. <https://doi.org/10.1186/s12905-019-0715-4> [CrossRef] [GoogleScholar] [PubMed]
 31. Wandera SO, Kwagala B, Odimegwu C. Intimate partner violence and current modern contraceptive use among married women in Uganda: A cross-sectional study. *Pan Afr Med J.* 2018;30(85). <https://doi.org/10.11604/pamj.2018.30.85.12722> [CrossRef] [GoogleScholar] [PubMed]