Domestic and Family Violence and its Association with Mental Health Among Pregnant Women Attending Antenatal Care in a Tertiary Hospital of Eastern Nepal

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ABSTRACT

Background: Pregnancy has been identified as a vulnerable period for both the initiation and escalation in severity of domestic and family violence. There is a significant dearth of scholarly literature documenting the relationship of domestic and family violence with the mental health and quality of life among pregnant women of Nepal.

Methods: Baseline data of 140 women enrolled in a trial of a psychosocial intervention for abused pregnant women were analysed. Face-to-face interviews were conducted using standardised scales. Prevalence of domestic and family violence and mental health conditions were estimated and inferential statistics were used to assess the association of domestic and family violence with mental health, quality of life, social support, and use of safety behaviours.

Results: The lifetime prevalence of domestic and family violence was found to be 27.7% (n = 173), followed by 17.1% of women (n = 107) fearing someone in their family. Domestic and family violence in the last 12 months was significantly associated with anxiety (p = 0.001), depression (p = 0.005), quality of life (p < 0.05), and perceived social support (p = 0.001). Use of safety behaviours (p = 0.037) was significantly low among women reporting domestic and family violence in the past year as well as during the current pregnancy (p = 0.017).

Conclusions: There exists a high psychological morbidity among pregnant women exposed to domestic and family violence. The findings support the need of implementing a screening and support intervention for abused women seeking antenatal services.

Keywords: Association; domestic violence; mental health; observational study; prevalence

INTRODUCTION

Despite a high prevalence of domestic and family violence (DFV) during pregnancy in developing countries,[1] it has only recently become a subject of research. Of the limited studies available from Nepal, estimates of DFV during and around the time of pregnancy range from 6% to 29%.[2-4]

A well-documented characteristic of DFV is controlling behaviours from husband and family members[5] and such control and restrictions can negatively influence the mental wellbeing of victims. DFV at the time of pregnancy has been strongly linked with mental health issues, such as anxiety, depression, and poor quality of life (QOL).[1,6,7] However, the relationship between DFV and mental health measures has not been explicitly documented in scholarly literature from Nepal.

This study aimed: 1) to assess the occurrence of DFV among pregnant women attending an antenatal clinic; and 2) to assess the relationship between common mental health issues and DFV.

METHODS

Baseline data of a randomised controlled trial (RCT) conducted to assess the impact of a psychosocial intervention in Nepal were analysed. A detailed

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description about the trial is included in another publication.[8] Using G*power and with 80% power, alpha level of 0.05, two-tailed, medium effect size (0.5) for difference between two independent means and 10% attrition rate, the total samples needed for the main trial was 140.[8] Prevalence of DFV was estimated using screening data while relationship between the DFV and other variables was assessed using data of 140 respondents recruited into the trial.

Data collection tools were pretested in a similar setting among 15 women meeting the inclusion criteria; however, those data were not included in the final analysis. The study was conducted in an antenatal clinic (ANC) of B.P. Koirala Institute of Health Sciences (BPKIHS), Nepal.[8] Pregnant women attending ANC of BPKIHS were screened one-on-one against eligibility criteria: 1) having gestation age 24-34 weeks; 2) aged 18 years and above; 3) having a positive history of DFV; and 4) with no hearing and/or cognitive impairment. Eligible women were recruited into the trial and the baseline data collection was conducted using validated standardised scales. Recruitment of participants and baseline data collection was done for 3 months (June to August 2018). A trained research assistant conducted interviews and participants' details were de-identified before analysis to ensure anonymity.

The variables measured in the study are as follows:

DFV: DFV refers to any and all forms of violence and abuse (physical, sexual, and emotional/psychological) perpetrated against a woman by someone in her husband's family.[9,10] DFV also includes any behaviour that is used to exert power and control over a person through fear. A woman's fear of someone in her family is considered as emotional violence.[11] The five-item Abuse Assessment Screen (AAS) was used to assess the prevalence of different forms of DFV.[3] It includes a question, "are you afraid of someone in your family?" which is used to assess for the presence of fear. The other four questions are used to assess if they have ever been emotionally, physically or sexually abused by someone in the family in which they were currently living. Women providing at least one affirmative response were categorised as being a victim of DFV[11], and they were further asked about who the perpetrator was. Women reporting fear, with or without violence were classified as having experienced fear and women reporting physical or sexual violence in the last 12 months were classified as having experienced DFV in the past year.

Anxiety and Depression: A 14-items Hospital Anxiety and Depression Scale (HADS) validated in Nepali was used to assess the prevalence of anxiety and depression.[12,13] Out of 14 items, 7 are related to depression and 7 are related to anxiety. A summed score of 8 and above in either scale indicates psychiatric morbidity (8-10: borderline cases, ≥11: severe and 0-7: normal).

QOL: It was measured using a translated and validated Nepalese abbreviated version of the World Health Organization QOL (WHOQOL-BREF) scale.[14] The scale measures four domains of QOL: physical, psychological, social, and environmental domains.

Perceived social support: A 5-items social support scale, which is an abbreviated version of the Medical Outcomes Study Social Support Scale (MOS-SSS) was used. Each item is scored on a five-point Likert scale with a total score ranging from 5-25.[15]

Self-efficacy: Generalised Self Efficacy Scale-10, a valid tool with high psychometric properties (Cronbach's alpha= 0.76-0.90,) was used to measure the self-efficacy. It [16]

Safety behaviours used: A safety behaviours checklist developed by McFarlane (2002) was modified to meet the local context and the final checklist used in this study consisted of 13 items.[17]

Socio-demographic variables: A self-constructed questionnaire was used to assess the socio-demographic variables, such as age, education, ethnicity, family type, personal habits, and income.

Data were collected on papers and checked for completeness and accuracy. Master charts were prepared in Microsoft (MS) Excel and analysed using the Statistical Package for Social Sciences (SPSS) version 25. Descriptive statistics, such as frequency distributions, percentages, means, and standard deviations (SD), were used to summarise the prevalence of DFV. Categorical variables were analysed using a Chi-square test or Fischer Exact test and numerical variables were analysed using an independent t-test or a Mann-Whitney U test. A p value of < 0.05 was considered statistically significant and graphs were generated using MS Excel.

The study was approved by the Griffith University Human Research Ethics Committee (2018/227), the Nepal Health Research Council (73/2018) and the Institutional Review Committee of BPKIHS (IRC/1250/018). The trial has been registered in the Australian New Zealand Clinical Trial Registry (Registration number. 12618000307202). Written informed consent was obtained and participants were assured of confidentiality and anonymity. Ethical and safety guidelines recommended by WHO were followed during the study.[18] All participants were provided with an updated contact details of locally available DFV support

services.

RESULTS

Screening against pre-set eligibility criteria took place in the ANC clinic of BPKIHS from Sunday to Friday for 3 months. A total of 625 pregnant women were screened and 173 (27.7%) reported experiencing at least one form of DFV at some point in their lives. Lifetime prevalence of physical and/or emotional violence was 26.1% (n = 163), followed by fear in relationship (n = 107, 17.1%), and physical violence in the last year (n = 42, 6.7%). The proportion of women reporting sexual violence in the last year was 3.8% (n = 24) and 3.5% of women reported physical violence during the current pregnancy (n = 20). Out of 173 women, 143 (82.7%) consented to be recruited into the trial. Three women withdrew from the study without completing the baseline questionnaire. A total of 140 women were randomly allocated to the intervention and control group on 1:1 basis. This paper presented the analysis of baseline characteristics of 140 participants involved in the study.

Patterns of different forms of Domestic and Family Violence (DFV)

Out of 140 participants, having a positive history of DFV, the majority (n = 131, 93.6%) reported to be the victims of lifetime emotional and physical violence. The proportion of respondents reporting physical violence in the last year was 27.9% (n = 39) and for sexual violence, the figure was 15% (n = 21). About one in ten women (n = 17) reported experiencing physical violence in their current pregnancy. A total of eighty-eight women (62.9%) reported having fear of someone in their family relationship (Figure 1).
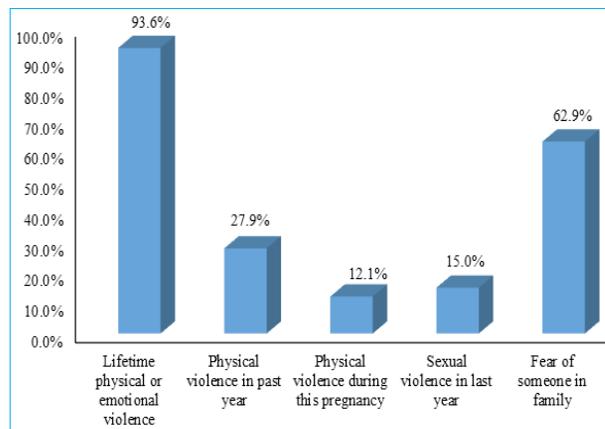

Figure 1. Prevalence of different forms of DFV experienced by participants.

Participants reporting at least one form of DFV were asked for further details about the perpetrators of the violence. The most common perpetrators were the woman's husband and mother-in-law, each accounting for 54.3% (n = 76), followed by father-in-law (n = 42, 30.0%), sister-in-law (n = 17, 12.1%) and others (7.1%). The perpetrators, including former partner (n = 3), brother-in-law (n = 4), and co-wife (n = 3) were merged into the category 'others'.

DFV and socio-demographic variables

Data were assessed for normal distribution using Kolmogorov-Smirnov test, histogram, and Q-Q plots. There was a significant difference in mean age of respondents who had experienced physical violence during this pregnancy compared to those who had not (p = 0.033). The risk of physical violence during pregnancy lowers with increase in the age of respondents. Other socio-demographic variables were not statistically associated with either the past year or current prevalence of DFV or with the experience of fear in relationship (p > 0.05) (Table 1).

Prevalence of mental health issues among victims of DFV

Nearly half of the respondents reporting the prevalence of DFV during the past year (n = 22) as well as physical violence during pregnancy (n = 9) were found to have higher anxiety level. However, only 36.4% (n = 32) of women experiencing fear of family members reported elevated anxiety level. Nearly one in every four victims (n = 11) reporting the past year prevalence of DFV was found to have depression and a slightly lower proportion of women (n = 14) reporting fear had depression level at 'severe' category. (Figure 2).

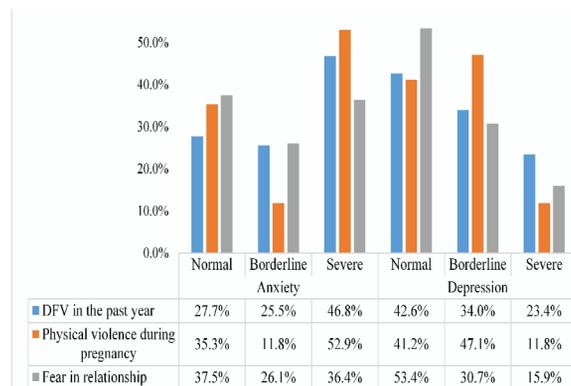|	Anxiety			Depression		
	Normal	Borderline	Severe	Normal	Borderline	Severe
DFV in the past year	27.7%	25.5%	46.8%	42.6%	34.0%	23.4%
Physical violence during pregnancy	35.3%	11.8%	52.9%	41.2%	47.1%	11.8%
Fear in relationship	37.5%	26.1%	36.4%	53.4%	30.7%	15.9%

Figure 2. Prevalence of anxiety and depression among victims of DFV.

Table 1. Association between DFV and socio-demographic variables (n=140).

Socio-demographic variables	DFV in the past year			Physical violence during pregnancy			Fear in relationship		
	Yes n (%)	No n (%)	p value	Yes n (%)	No n (%)	p value	Yes n (%)	No n (%)	p value
Age in years Mean (SD)	24.64 (5.99)	25.95 (4.83)	0.078*	23.59 (6.78)	25.77 (4.99)	0.033*	24.81 (4.72)	26.69 (5.93)	0.075*
Education									
Up to secondary level	36 (76.6)	59 (63.4)	0.116	15 (88.2)	80 (65.0)	0.055	61 (69.3)	34 (65.4)	0.630
Higher secondary level and above	11 (23.4)	34 (36.6)		2 (11.8)	43 (35.0)		27 (30.7)	18 (34.6)	
Ethnicity									
Brahmins/Chhetris	14 (29.8)	26 (28.0)	0.920	3 (17.6)	37 (30.1)	0.593	26 (29.5)	14 (26.9)	0.840
Dalits	6 (12.8)	15 (16.1)		4 (23.5)	17 (13.8)		13 (14.8)	8 (15.4)	
Terai Madhesi	6 (12.8)	14 (15.1)		3 (17.6)	17 (13.8)		14 (15.9)	6 (11.5)	
Janajatis	21 (44.7)	38 (40.9)		7 (41.2)	52 (42.3)		35 (39.8)	24 (46.2)	
Family type									
Nuclear family	18 (38.3)	29 (31.2)	0.400	8 (47.1)	39 (31.7)	0.209	27 (30.7)	20 (38.5)	0.346
Joint family	29 (61.7)	64 (68.8)		9 (52.9)	84 (68.3)		32 (61.5)	61 (69.3)	
Personal source of income									
Yes	17 (36.2)	35 (37.6)	0.866	7 (41.2)	45 (36.6)	0.713	30 (34.1)	22 (42.3)	0.331
No	30 (63.8)	58 (62.4)		10 (58.8)	78 (63.4)		58 (65.9)	30 (57.7)	
Smoking status									
Current smoker	3 (6.4)	2 (2.2)	0.210†	1 (5.9)	4 (3.3)	0.482†	3 (3.4)	2 (3.8)	0.615†
Past smoker/ Never smoked	44 (93.6)	91 (97.8)		16 (94.1)	119 (96.7)		85 (96.6)	50 (96.2)	
Alcohol consumption status									
Currently consuming	8 (17.0)	10 (10.8)	0.295	3 (17.6)	15 (12.2)	0.377†	12 (13.6)	6 (11.5)	0.720
Past user/ Never used	39 (83.0)	83 (89.2)		14 (82.4)	108 (87.8)		76 (86.4)	46 (88.5)	

*p-values derived from Mann-Whitney U test, † p-values derived from Fischer exact test, n: Frequency; SD: Standard deviation, Bold indicates significant

Association of DFV with mental health, QOL, social support and use of safety behaviours

Participants reporting DFV in the last year had significantly higher scores of anxiety and depression (10.79 ± 4.74 and 7.66 ± 3.63 respectively), than those not reporting DFV in the past year. Similarly, they were found to have significant lower scores of QOL on all three domains (p < 0.05), except for physical domain (p = 0.576), compared to those not reporting DFV in the last year. Women reporting fear in their relationship had lower physical QOL scores and those not reporting (p = 0.036) There were no significant differences in the mean scores of the mental health and QOL between the participants experiencing physical violence during current pregnancy and those not experiencing (p > 0.05) (see Table 2).

Mean scores of safety behaviours used was significantly low among participants who had experienced DFV in the past year (5.70 vs 6.68, p = 0.037), and this was also true among participants experiencing physical violence in the current pregnancy (p = 0.017). Women experiencing DFV in the last 12 months had significantly lower social support, compared to those not experiencing (3.19 vs 3.72, p = 0.001). Mean self-efficacy scores were significantly lower among the women reporting fear or DFV in the past year (see Table 3).

Table 2. Association of DFV with mental health and QOL (n=140).

	Anxiety		Depression		Physical QOL		Psychological QOL		Social QOL		Environmental QOL	
	M (SD)	p value	M (SD)	p value	M (SD)	p value	M (SD)	p value	M (SD)	p value	M (SD)	p value
DFV in last year (n=47)												
Yes	10.79 (4.74)	0.001*	7.66 (3.63)	0.005*	14.10 (3.00)	0.576	12.84 (2.83)	0.034*	12.85 (3.52)	0.014*	12.30 (2.63)	0.001
No	8.17 (4.37)		5.91 (3.91)		14.38 (2.59)		13.84 (2.49)		14.42 (3.01)		13.83 (2.54)	
Physical violence in current pregnancy (n=17)												
Yes	10.94 (4.85)	0.104*	7.59 (2.21)	0.106*	13.88 (2.17)	0.517	12.82 (2.70)	0.229*	12.31 (4.28)	0.216*	12.86 (2.47)	0.448
No	8.79 (4.58)		6.35 (4.05)		14.34 (2.81)		13.59 (2.63)		14.11 (3.05)		13.38 (2.69)	
Fear in relationship (n=88)												
Yes	9.39 (4.54)	0.229*	6.88 (3.93)	0.129*	13.92 (2.48)	0.036	13.20 (2.53)	0.062*	13.77 (3.33)	0.679*	13.01 (2.40)	0.093
No	8.48 (4.81)		5.87 (3.78)		14.91 (3.03)		14.01 (2.78)		14.10 (3.17)		13.84 (3.01)	

*p values derived from Mann-Whitney U test; M: Mean; SD: Standard deviation, Bold indicates significant

Table 3. Association of DFV with social support, self-efficacy and safety behaviours used (n=140).

	Social Support		Self-efficacy		Safety behaviours used	
	M (SD)	p value	M (SD)	p value	M (SD)	p value
DFV in last year (n=47)						
Yes	3.19 (0.87)	0.001*	2.83 (0.68)	0.073*	5.70 (2.90)	0.037*
No	3.72 (0.85)		3.03 (0.59)		6.68 (2.46)	
Physical violence in current pregnancy (n=17)						
Yes	3.26 (0.89)	0.170*	2.70 (0.62)	0.050*	5.00 (2.37)	0.017*
No	3.58 (0.89)		3.00 (0.62)		6.54 (2.64)	
Fear in relationship (n=88)						
Yes	3.49 (0.95)	0.399*	2.93 (0.57)	0.156*	6.07 (2.58)	0.072*
No	3.62 (0.79)		3.01 (0.72)		6.83 (2.72)	

*p-values derived from Mann-Whitney U test; M: Mean; SD: Standard deviation, Bold indicates significant

DISCUSSION

This study found that more than a quarter of pregnant women attending the ANC clinic of BPKIHS had experienced DFV in their lifetime. Husbands and mothers-in-law were the most common perpetrators of DFV. These findings were in consistent with other studies from Nepal.[3,10] In a patriarchal society such as Nepal, inequalities and power imbalances between men and women may account for women being afraid of someone in their families.[19] Moreover, after marriage, a woman is expected to live with her husband and his family and thus, adjustment in such completely new environment may evoke fear, uncertainty, and anxiety among that newly married woman.[11] A greater proportion of women were identified to have fear of someone in their family relationship, and further research is needed to understand the actual reasons for the fear in marital relationship.

This study provided an empirical support to other studies demonstrating a link between the mental illness and DFV,[20,21] and this linkage warranted important issues for service response. Firstly, health care providers (HCPs) need to be attuned to negative mental health impacts of DFV in order to provide holistic care to victims, including addressing their emotional needs and referring to the specialised services based on their needs.[22] Secondly, there is a need of development of strategies to screen for DFV in women presenting with mental illness.[23] This

would improve the reach and identification of victims of DFV and provide an opportunity to put in place prevention strategies against mental illness.[20]

Consistent to this study, other studies also support that the experiences of DFV negatively influences the victim's capacity to identify and access support services and adopt safety behaviours.[24] A strong relationship between the psychological health and supportive social networks has also been well documented in literature.[25] Though, further exploratory research is needed to establish a plausible explanation, it can be hypothesised that women who are in a stressful state as a result of DFV will likely have a dire need of emotional and practical support to help them cope and deal with the situation. Failure to obtain such support can worsen their mental health, while support from formal and informal networks may help victims in restoring their mental wellbeing. There is an urgent need of interventions concerning improving safety behaviours usage and social support networks for the prevention and mitigation of DFV and its associated complications, especially during pregnancy. [26]

Prevalence rates obtained in this study were comparable to other similar studies from Nepal.[3,4] However, it must be noted that these prevalence rates might be underestimated as victims of DFV are less likely to attend regular ANC.[27] In addition, because of the shame and fear or cultural acceptance of violence, many women might have said 'no' when asked about their experiences of violence.[5,10] However, efforts were made to establish good rapport before proceeding with the interviews and the interviews were conducted on a private and secure counselling room to ensure confidentiality and safety to the participants. The cross-sectional nature of the study limits inferring the casual association between the DFV and mental health; hence, further longitudinal studies are recommended.

Despite these limitations, it must be acknowledged that this study has shed new light on an important but often overlooked topic in the Nepalese context. DFV is not routinely asked in a setting where this study was conducted so, this study provided an opportunity to explore the possibility of undertaking routine enquiry regarding DFV in an antenatal setting. Measures, such as use of validated and standardised tools and pilot testing were adopted to improve the validity and reliability of the study findings. The present study supports the necessity of addressing the mental health impacts of DFV in women's lives, particularly during pregnancy and directing efforts towards better policy formulation and implementation in resource-constrained settings. The generalisability of findings is limited as the study was conducted in a single setting. However, it must be noted that the study was undertaken in a hospital with larger catchment areas and higher patient flow, because of which women from diverse background were reached.[8]

CONCLUSIONS

The present study found that just above 27% of pregnant women reported having experienced DFV at some point in their lives. This study supports the need of routine enquiry about DFV in an antenatal setting to help pregnant women in disclosing their episodes of violence. Furthermore, such enquiry can provide an opportunity to HCPs to assist victims in overcoming the impacts of DFV on their health and wellbeing and help them in connecting with social support networks. Though, this study identified a significant relationship between the DFV and mental health conditions, the current evidence is not sufficient and strong enough to suggest DFV as an independent predictor of the poor mental health. Further longitudinal research exploring the role of individual and contextual factors in mediating DFV is warranted to establish a possible casual association.

ACKNOWLEDGEMENTS

REFERENCES

1. James L, Brody D, Hamilton Z. Risk factors for domestic violence during pregnancy: a meta-analytic review. Violence Vict. 2013;28(3):359-80.

2. Ministry of Health, New Era, ICF International Inc. Nepal demographic and health survey 2016. Kathmandu, Nepal: Ministry of Health; 2017.

3. Rishal P, Pun KD, Darj E, Joshi SK, Bjørngaard JH, Swahnberg K, et al. Prevalence and associated factors of domestic violence among pregnant women attending routine antenatal care in Nepal. Scand J Public Health. 2017;46(8):785-93.[Article]

4. Singh 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 Birth. 2018;31(2):96-102.[Article]

5. Gautam S, Jeong H-S. Intimate partner violence in relation to husband characteristics and women empowerment:

evidence from Nepal. Int J Environ Res Public Health. 2019;16(5):709.[Article]

6. Howard LM, Oram S, Galley H, Trevillion K, Feder G. Domestic violence and perinatal mental disorders: a systematic review and meta-analysis. PLoS Med. 2013;10(5):e1001452.[Article]

7. World Health Organization. Responding to intimate partner violence and sexual violence against women: WHO clinical and policy guidelines. Geneva: World Health Organization; 2013.[Download PDF]

8. Sapkota D, Baird K, Saito A, Rijal P, Pokharel R, Anderson D. Counselling-based psychosocial intervention to improve the mental health of abused pregnant women: a protocol for randomised controlled feasibility trial in a tertiary hospital in eastern Nepal. BMJ Open. 2019;9(4):e027436. [Article]

9. Garcia-Moreno C, Jansen HA, Ellsberg M, Heise L, Watts CH. Prevalence of intimate partner violence: findings from the WHO multi-country study on women's health and domestic violence. Lancet. 2006;368(9543):1260-9. [Article]

10. Sapkota D, Bhattarai S, Baral D, Pokharel PK. Domestic violence and its associated factors among married women of a village development committee of rural Nepal. BMC Res Notes. 2016;9(1):178.[Article]

11. Pun KD, Rishal P, Darj E, Infanti JJ, Shrestha S, Lukasse M, et al. Domestic violence and perinatal outcomes–a prospective cohort study from Nepal. BMC Public Health. 2019;19(1):671.[Article]

12. Zigmond AS, Snaith RP. The hospital anxiety and depression scale. Acta Psychiatrica Scand. 1983;67(6):361-70. [Article]

13. Risal A, Manandhar K, Linde M, Koju R, Steiner T, Holen A. Reliability and validity of a Nepali-language version of the Hospital Anxiety and Depression Scale (HADS). Kathmandu Univ Med J. 2015;50(2):115-24.[Article]

14. World Health Organization. WHOQOL user manual: Programme on mental health: World Health Organization; 1998.

15. Sherbourne CD, Stewart AL. The MOS social support survey. Soc Sci Med. 1991;32(6):705-14.[Article]

16. Schwarzer R, Jerusalem M. Generalized self-efficacy scale 1995 [Available from: https://userpage.fu-berlin.de/health/engscal.htm

17. McFarlane J, Malecha A, Gist J, Watson K, Batten E, Hall I, et al. An intervention to increase safety behaviors of abused women: results of a randomized clinical trial. Nurs Res. 2002;51(6):347-54.[Article]

18. WHO. Ethical and safety recommnedations for intervention research on violence against women: Building on lessons from the WHO publication Putting Women first: ethical and safety recommnedations for research on domestic violence against women. Geneva: World Health Organization; 2016.

19. Emery CR, Thapa S, Wu S. Power and control in Kathmandu: a comparison of attempted power, actual power, and achieved power. Violence Against Women. 2017;23(4):482-502.[Article]

20. Elbogen EB, Johnson SC. The intricate link between violence and mental disorder: results from the National Epidemiologic Survey on Alcohol and Related Conditions. Arch Gen Psychiatry. 2009;66(2):152-61.[Article]

21. Saito A, Creedy D, Cooke M, Chaboyer W. Effect of intimate partner violence on antenatal functional health status of childbearing women in northeastern Thailand. Health Care Women Int. 2013;34(9):757-74.[Article]

22. Braaf R, Meyering IB. The gender debate in domestic violence: The role of data. Sydney: Australian Domestic and Family Violence Clearinghouse; 2013 May 2013. 23 p.

23. Mahase E. Women who experience domestic abuse are three times as likely to develop mental illness. BMJ. 2019;365:14126.[Article]

24. Sigalla GN, Rasch V, Gammeltoft T, Meyrowitsch DW, Rogathi J, Manongi R, et al. Social support and intimate partner violence during pregnancy among women attending antenatal care in Moshi Municipality, Northern Tanzania. BMC Public Health. 2017;17(1):240.[Article]

25. Coker AL, Smith PH, Whitaker DJ, Le B, Crawford TN, Flerx VC. Effect of an In-Clinic IPV Advocate Intervention to Increase Help Seeking, Reduce Violence, and Improve Well-Being. Violence Against Women. 2012;18(1):118-31.[Article]

26. Sapkota D, Baird K, Saito A, Anderson D. Interventions for reducing and/or controlling domestic violence among pregnant women in low-and middle-income countries: a systematic review. Syst Rev. 2019;8(1):79. [Article]

27. Islam MJ, Broidy L, Baird K, Mazerolle P. Exploring the associations between intimate partner violence victimization during pregnancy and delayed entry into prenatal care: Evidence from a population-based study in Bangladesh. Midwifery. 2017;47:43-52.[Article]