# Physical violence and associated factors during pregnancy in Yirgalem town, South Ethiopia.

#### Zemenu Yohannes Kassa\*, Alemu Workineh Menale

Hawassa University College of Medicine and Health Sciences, Hawassa, SNNPRS, Ethiopia

#### Abstract

Physical violence during pregnancy is an endemic global problem, which endanger to mother and fetus. Even if violence of women right especially in developing countries like Ethiopia isn't progress and achieve sustainable development goal. Aims of this study to assess Physical violence and associated factors during pregnancy in Yirgalem Town, Sidama Zone, South Ethiopia 2015.

Methods: Facility based cross sectional study was conducted among 216 who attended ANC in Yirgalem health center, Sidama Zone, South Ethiopia, April 31-may 30 2015.

The data were collected by interview pretest structured questionnaires by consecutive sampling methods. Both logistic regression bivariate and multivariate analysis were done to identify predictors of physical violence during pregnancy.

Results: in this study 12% pregnant women currently experience physical violence. Physical violence experience by illiterate spouse 1.7 times than literate spouse [AOR = 1.7, 95% CI: 1.1-2.8]. Unwanted pregnancy occurs women have 17 times incident of physical violence [AOR = 17.1, 95% CI: 3.5-83.2]. Spouse who had habits 8.7 times abuse her wives [AOR = 8.7, 95% CI: 2.98-25.6].conclusion: the magnitude of physical violence during pregnancy in this study is high relation to other studies conducted so far in the country. Significantly associated variables were education; spouse habits and unwanted pregnancy were associated factors for physical violence during pregnancy. Recommendation: community leaders, "edir" Organizers, religious leaders, health sectors, health extension workers and stakeholders give attention regarding to the problems to publicize and teach the community the adverse outcome of physical violence.

Keywords: Physical violence, Pregnancy, Yirgalem, Ethiopia

Accepted April 20, 2016

#### Introduction

Overall, 35% of women worldwide have experienced either physical and/or sexual Intimate partner violence or non-partner sexual violence [1]. Physical violence during pregnancy has been associated with adverse maternal and fetal health outcomes. Therefore, early identification and intervention to prevent abuse of pregnant women may reduce the adverse outcomes [2]. According to multi country study reported between 10-69% of the women had suffered from physical violence at some point in their life; from this between 0.9 and 20.1% occur during pregnancy. In fact, the frequency of violence against pregnant women increases and become more severe during this period [3].

Worldwide, it has been estimated that physical violence

against women is as serious a cause of death of incapacity among women of reproductive age as cancer, and a greater cause of ill health than traffic accidents and malaria combined [4]. The world bank has recognized gender based violence (GBV) including physical violence as a heavy health burden from women aged 15-44 similar to the risk posed by HIV, TB, infection during child birth, cancer and heart disease, abuse is an obstacle to the achievements of quality, development and peace. Even though Violence during pregnancy occurs more frequently than some routinely screened obstetric complications, including in preeclampsia and gestational diabetes [5]. Globally at least one in every three woman had experienced some physical violence in their life time. In Ethiopia 85% of women believes that husband has justified in beating their wife for at least one reason. Eighty one percent of women reported severe physical violence in Ethiopia due to context in which it is acceptable means for husbands to control or chastise their wives [6]. Similar study was done in rural southwest Ethiopia, women who are experienced physical violence were more likely than non-abused women to believe that a man could be justified to hit by partner when she failed to complete work or when she did not obey him [7].

Physical violence against women is present in every country regardless of socio economic development. Nevertheless it is more common in certain sub groups in the population than others. Several factors have been shown to be associated with physical violence including young age, lower educational level, smoking during third trimester of pregnancy, alcohol and drug use, stress full life events as well as lack of faith in God or higher power and lack of contraceptive use .Additionally, poor quality of relationship with their husband the presence of abuse before pregnancy and fertility factors are important [8]. Similar study in North America indicate that, the most common type of violence during pregnancy is kicking (boxing) and dragging followed by firing with corrosive; whereas in developing country including Ethiopia, the most common type of violence is sticking and kicking (boxing) followed by slapping. The prevalence ranges from 4 to 8.5 [9].

According to a review of six studies from India, China, Pakistan and Ethiopia, the prevalence ranged 4 to 28% from which four of these studies were hospital based and found prevalence of 4-22%. The other two were population based covering both urban and rural areas with reported prevalence of 10-28%. A multi country population based study conducted by WHO shows the rate of physical violence during pregnancy in 10 developing countries ranged from 3 to 28% [10]. A study conducted in South Africa state as physical violence during pregnancy (80%) has been practiced dangerously. It was a dual destruction because both the mother and the fetus suffered by the violence [9].

The main risk factors found for physical violence during pregnancy were belonging to a low-income group, low education in both partners, and unplanned pregnancy. Low birth as a consequence of violence is observed. The vulnerability of pregnant women to violence and to their consequences is an alarming public health issue in developing countries and calls for the design and implementation of better preventive strategies [11].

# Methods

#### Setting and population

The study was conducted in yirgalem health center from April 31- May30, 2015. The study was conducted in Yirgalem Health center which is located at Yirgalem town 47 km far from Hawassa, the capital city of SNNPRS.

Yirgalm health center is located 325 km away from Addis Ababa (Capital city of the country) to the south direction. It gives the service for total population of 39,703. According to records 15 women attended ANC daily in yirgalem health center [12]. Women who were attending antenatal care in yirgalem health center were recruited as source population for the study. The study population was all recently visiting during the data collection period. Women who were not mentally and physically capable of being interviewed and women admitted for gynecology ward were excluded.

#### Study design and sampling

Facility based cross sectional study was conducted among who attended ANC in yirgalem town health center. The sample size was calculated by using the formula for single population proportion with assumption of 95% confidence interval, 5% degree of precision and 15% from the study was conducted at Hosanna town, Hadiya zone [13]. By adding non-response rate 10%, final total sample sizes were 216. Consecutive sampling technique was undertaken by taking every woman who was attended ANC in health center during data collection period.

#### **Data Collection and Measurement**

Pre-tested structured questionnaires were prepared after reviewing relevant literature [14-19]. The questionnaires were first prepared in English and then translated to Amharic, and then it was translated back to English to check for its consistency. Pre-test was conducted among 5% of study subjects prior to the study in wondogenet health center which is similar socioeconomic characteristics. Based on the result the questionnaires were modified as necessary. The data were collected by interviewing structured questionnaire. The questionnaires were interviewing every study subject during the data collection period, and who met the inclusion criteria.

Two female midwives and one supervisor's were recruited as interviewers and as supervisors respectively. Data collectors and supervisors were trained for two day on interviewing techniques, purpose of the study, importance of privacy, sensitivity of the issue, discipline and approach to the interviewees and confidentiality of the respondents. The principal investigator and supervisors were made a day to day on site supervision during the whole period of data collection and checked each questionnaire daily for completeness and consistency.

Physical violence includes any of one or more (slapped, pushed or shoved, hit with fist or something else that could hurt you, beaten abdomen, choked or burnt on purpose, used or threatened to use knife, gun or weapon).

#### Data processing and analysis

Data editing, coding and cleaning were carried out and the data were entered into Epi-Data version 3.1 and then, it was exported into SPSS version 20.0 statistical software for analysis. Different frequency tables, graphs and

descriptive summaries were used to describe the study variables. Bivariate logistic regression analysis was used to see significant of association between the outcome and independent variables. Variables with P-value < 0.2 in bivariate analysis were transferred to multivariate logistic regression. Odds ratios at 95% CI were computed to measure the strength of the association between the outcome and the explanatory variables. Multivariate logistic regressions were performed to identify the most significant predictors of physical violence and to control for confounders. P-value < 0.05 was considered as statistically significant.

#### Ethical consideration

Ethical approval and clearance was taken from institutional review board of College of Medicine and Health Sciences, Hawassa University. Regional Education Bureau gave permission to conduct the study in each selected schools in the study area. After explaining the purpose of the study, verbal informed consent was obtained from respondents before data collection. The right to withdraw the study at any time was also assured. Coding was used to eliminate names and other personal identification of respondents throughout the study process to ensure participants confidentiality.

#### Result

In this study 216 women's visiting ANC clinic were participated. Majority 69 (31.9%) of the participants were in the age group of 25-29 years of age. The mean ages of the participants were  $25 \pm 6$  years. Most of the respondents' ethnic groups were sidama 153 (70.8%). One hundred three (47.7%) were protestant follower and 211 (97.7%) respondents were (Table 1).

# Habits of spouse and educational status

Most of the spouses had primary school atained 70 (32.4%) (Tables 2 and 3). Thirty (13.9%) spouse had habits . Most of spouse habits were 16 (53.3%) drunk alcohol (Figure 1).

# Type of physical violence during pregnancy

There were 26 (12%) respondents experience physical violence during pregnancy, from this 10 (38.5%) were kicking (Figure 2).

# Risk factors of physical violence during pregnancy

Almost half of physical violence was distrust to b/n them 11 (42.3%) (Table 4).

# *Bivariate and multivariate logistic regression analysis on physical violence during pregnancy*

Twenty six (12%) of pregnant women experience physical violence among this pregnancy, despite of above kicking was commonly occurring. Physical violence experience by illiterate spouse 1.7 times than literate spouse [AOR = 1.7, 95% CI: 1.1-2.8]. Unwanted pregnancy occurs women have 17 times incident of physical violence [AOR = 17.1,

Table 1: Socio- demographic characteristic of the respondents
in the yirgalem health center may, $2015$ ( $N=216$ ).

Variable	Parameter	Frequency	Percentage (%)	
Age of the mothers	15-19	31	14.3	
	20-24	68	31.5	
	25-29	69	31.9	
	30-34	32	14.8	
	35-39	12	5.6	
	40-44	4	1.9	
	Orthodox	40	18.5	
	Muslim	33	15.3	
Religion	Protestant	103	47.7	
Kengion	Catholic	18	8.3	
	Other	22	10.2	
	Sidama	153	70.8	
	Gurage	20	9.3	
Ethnicity	Wolyita	18	8.3	
Ethnicity	Amhara	13	6	
	Oromia	8	3.7	
	Other	4	1.9	
	Married	211	97.7	
Marital status	Single	3	1.4	
Iviainai Status	Divorced	2	0.9	
	Total	216	100	
	House wife	122	56.5	
	Merchant	49	22.7	
Occupational status	Government employee	28	13	
status	Student	10	4.6	
	Farmer	5	2.3	
	Other	2	0.9	
	Illiterate	43	19.9	
Educational	Read and writing	47	21.8	
status of respondents	1 to 8	72	33.3	
Pondonio	9 to12	38	17.6	

**Table 2:** Educational status of spouse in yirgalenm health center May, 2015(N=216).

	Illiterate	25	11.6
	Read and writing	32	14.8
Educational status of spouse	1-8	70	32.4
spouse	9-12	62	28.7
	12+	27	12.5
10			

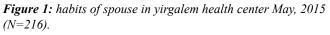


Table 3: Age distribution of physical violence during pregnancy among respondents in yirgalem health center May, 2015 (216).

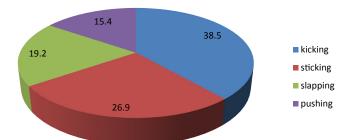
Physical violence during pregnancy	Age group	Frequency	Percent	Physical violence during non-pregnant time	frequency	Percent
	15-19	4	15.3		4	26.7
	20-24	7	26.9		4	26.7
	25-29	8	30.8		5	33.3
	30-34	5	19.2		1	6.6
	35-39	1	3.8		1	6.6
	40-44	1	3.8			
	Total	26	100		15	100

*Table 4:* Risk factors of physical violence during pregnancy in yirgalem health center May, 2015(N=216).

Variable	Frequency	Percentage (%)		
Distrust	11	42.3		
Intoxication	7	26.9		
Unwanted pregnancy	4	15.4		
Low income	4	15.4		
Total	26	100		

**Table 5:** Bivariate and multivariate logistic regression analysis on physical violence during pregnancy in Yirgalem town health center, South Ethiopia, may, 2015 (n=216).

Variables	Physical violence	:	OR 95%	CI	
	yes	no	crude	adjusted	P -value
Spouse educational status					
Illiterate	96	171	1.8(1.3-2.7)	1.7(1.1-2.8)	0.018
Literate	6	19	1.00	1.00	
With whom living now					
With husband lives	186	211	0.4(0.1-1.7)	2.6(0.3-21.1)	0.4
Out of husband lives	2	5	1.00	1.00	
Disagreement of the pregnancy					
Planned pregnancy	109	11	11.1(3.1-39.7)	17.1(3.5-83.2)	0.00
Unplanned pregnancy	183	205	1.00	1.00	
Spouse habits					
Spouse has habits	172	18	7.2(2.8-18.7)	8.7(2.98-25.6)	0.00
Spouse has not habits	1612		1.00	1.00	
Occupation of spouse					
Have stable occupation	171	191	1.3(0.9-1.9)	1.2(0.8-1.8)	0.4
Have not stable occupation	18	26	1.00	1.00	



*Figure 2: Type of physical violence during pregnancy in yirgalem health center May, 2015 (N=216).* 

95% CI: 3.5-83.2]. Spouse who had habits 8.7 times abuse her wives [AOR = 8.7, 95% CI: 2.98-25.6] (Table 5).

#### Discussion

In this study 41 (19%) of the study participants had reported a history of physical abuse in their life time. From those who were suffered to physical abuse 26 (66.7%) of them have been physically abused during the time of pregnancy and its prevalence was 12%. This study is slightly higher than the study was done by WHO Butajira, Ethiopia 8%, but lower than in a population-based study was in South African about 25% of the women reported experiencing physical abuse from a partner in their lifetime and lower than the study was done north west Ethiopia Domestic Violence among Pregnant Women. Among 425 women interviewed, 137 (32.2%) were experiencing domestic violence by their intimate partner [3,14,15]. This might be due to the difference of the two cities and the time of study. This study also slightly lower than the study was in North America was 4 to 8% [9]. This might be socio cultural difference b/n the two countries. The result of this study is not consistent when it is compared to the study conducted at Hadiya zone which was 15% [13]. This may be due to previous study was conducted in many public health facilities. In this study (19%) was experience life

time abuse. Which is highly lower than the study was done at Butajira, Ethiopia 49% [3].

Regarding to this study kicking 10 (38.5%) was the major types of physical violence followed by sticking 7 (26.9%) and pushing is the least 3 (11.5%), but this study is inconsistent with the study done at Belgium which state that slapping was leading type of physical violence during pregnancy and similar study was done in Nigeria. The most frequent form of violence was forceful sexual intercourse followed by threat and slapping which accounted for 60.9%, 20.3% and 18.7% respectively [15]. Coincide to the study was conducted at USA which states as in developing country including Ethiopia, the most common type of violence is sticking and kicking (boxing) followed by slapping [9,16].

Many risk factors were identified as the cause of physical violence during pregnancy in different studies. In this study distrust 11 (42.3%) was the leading risk factor followed by intoxication, unwanted pregnancy, low income and others with value of 26.9%, 15.3%, 7.7% and 7.7% respectively and it is consistent as compared to other studies conducted in USA. The second risk factor which is intoxication can be related result due to about 15% of their spouses from the total study participants have habit of alcohol [17]. The study was done India with alcoholic husbands were 4.56 times more likely to experience physical violence. Tobacco-chewing and smoking were not associated with physical domestic violence [18].

In this study the 1st ANC attendant, majority 19 (73%) of the abused women were attended at the 2nd and 3rd trimester but, 7 (27%) attended at the 1st trimester of their gestational age. This indicates us delayed attendance of their ANC service that is another outcome which did not leave easily to the abused pregnant women which is very important to reduce the obstetric complications due to abusing. The result was comparable with other study's which had studied in US that indicates physical abuse during pregnancy was associated with delayed entry in to or inadequate prenatal care [14].

Our interesting findings were Physical violence experience by illiterate spouse 1.7 times than literate spouse [AOR = 1.7, 95% CI: 1.1-2.8]. Unwanted pregnancy occurs women have 17 times incident of physical violence [AOR = 17.1], 95% CI: 3.5-83.2]. Spouse who had habits 8.7 times abuse her wives [AOR = 8.7, 95% CI: 2.98-25.6]. The study was in Nkangala district partner drinks too much [OR 4.50, CI 2.49 - 8.00] [19]. This study is consistent with the study was in in Hulet Ejju Enessie District, Northwest Ethiopia Married women at the age of  $\leq 15$  years were about four times (AOR = 4.2, 95% CI 1.9–9.0) more likely to experience domestic violence during pregnancy than their counterparts. Meanwhile, interparental exposure to domestic violence during childhood (AOR = 2.3, 95% CI 1.1-4.8), having frequently drinker partner (AOR= 3.4, 95% CI 1.6-7.4), and undesired pregnancy by partner

(AOR = 6.2, 95% CI 3.2-12.1) were the main significant factors that increase risk of domestic violence during pregnancy [15,20].

#### Conclusion

The study indicated that physical violence during pregnancy was common experience since about one out of ten were abused. Partner educational status and alcohol drinking were associated with physical violence during pregnancy. From the risk factors distrust is most common cause of violence. Regarding to the respondents report the prevalence of physical abuse on pregnant women was 26 (12%) from those abused about 18 (69.2%) of them attacked during the previous pregnancy and the least account for current pregnancy which is 8 (30.8%). Kicking, sticking, slapping and pushing were listed as common types of physical violence during pregnancy from these kicking were the leading type of violence which accounts 10 (38.4%).

#### Recommendation

It is better clinicians who are working at ANC to screen physically abused pregnant women so as to prevent obstetric complications related to physical violence. Male involvement in RH including care of pregnant women so that spouses gives a good care for pregnant women instead of abusing them because they need much more care than non-pregnant time. It is better the government to allow targeting of interventions and prevention strategies like, working in collaboration with community leaders, religious leaders as well as health extension workers to eradicate the root causes of physical violence during pregnancy.

#### References

- 1. WHO. Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence 2013.
- Tegbar Y, Anwari Y, Yigitaw K. Domestic violence around Gondar in North West Ethiopia. Domestic health dev 2004; 18:133-140.
- World Health Organization. Multi-country study on women's health and domestic violence against women. Summary Report of Initial Results on Prevalence, Health Outcomes and Women's Responses. Geneva: World Health Organization 2005.
- 4. Avery M. Physical volume against pregnant women in North Carolina 2007.
- 5. Barbara S, Mary E. "violence against women." Outlook UNFPA 2002; 20:1-8.
- 6. Central statistical agency. EDHS 2006.
- 7. Deribew A. Magnitude and risk factor of IPV against women in Agaro town south west Ethiopia 2007.
- 8. Michelle SP, Easmon O, Ellis OD, et al., Physical violence during pregnancy and pregnancy outcomes in Ghana BMC pregnancy and child birth 2014.

- Mohammed EH, Mohjurul B, Suriya K. "Prevalence and experience of Domestic violence among rural pregnant women in kwazulu- Natal, south Africa" south. Afr J, Epidemiol – Infect 2009; 34-37.
- Ruchira TN, Lars P. Factors Associated with Physical Spousal Abuse of Women During Pregnancy in Bangladesh International Family Planning Perspectives 2008.
- Nasir K, Hyder AA. Violence against pregnant women in developing countries: Review of evidence. Eur J Public Health 2003;13:105-107.
- 12. Yirgalem health center records 2015.
- Tariku L, Tefera B, Meseret T. Prevalence and Associated Factors of Intimate Partner Violence during Pregnancy among Recently Delivered Women in Public Health Facilities of Hossana Town, Hadiya Zone, Southern Ethiopia. Open Access Library Journal 2014.
- Jewkes R, Penn-Kekana L, Levin J. Risk factors for domestic violence: Findings from a South African cross-sectional study. Soc Sci Med 2003; 55: 1603-1618.
- 15. Tenaw Y, Tesfaye G, Gudina E, et al. Magnitude of Domestic Violence and Associated Factors among Pregnant Women in Hulet Ejju Enessie District, Northwest Ethiopia. Hindawi Publishing Corporation Advances in Public Health 2014.
- The International Bank for Reconstruction and Development. World development report 1993. New York, NY: Oxford University Press, 1993.
- Esther AE, Lornengen C, Mathilda E, et al. Domestic violence among pregnant women attending antenatal clinic in a PHC facility in Jos north LGA Plateau State Nigeria. E3 Journal of Medical Research 2012; 1: 063-068.
- Pankaj S, Geeta P, Ramesh B, et al. Magnitude and Risk Factors for Physical Domestic Violence during Pregnancy. International Journal of Scientific Study 2014.
- Matseke G, Peltzer K, Mlambo G. Partner violence and associated factors among pregnant women in Nkangala district, Mpumalanga. S Afr J OG 2012;18:77-81.
- Peedicayil A, Sadowski LS, Jeyaseelan L, et al. Spousal physical violence against women during pregnancy. British Journal of Obstetrics and Gynaecology 2004;111:682–687.

#### \*Correspondence to:

Zemenu Yohannes Kassa Hawassa University College of Medicine and Health Sciences, Hawassa, SNNPRS, Ethiopia Tel: +251462120075/ +251920315430 E-mail: zemenu2013@gmail.com