ORIGINAL ARTICLE

Prevalence of Domestic Violence among Pregnant Women Visiting Federal General Hospital Islamabad

Danish Nadeem¹, Saira Alyas², Waheed Iqbal³, Jamal Zafar⁴, Shahzad Ali Khan⁵, Mudassar Mushtaq Jawad Abbasi⁶

ABSTRACT

Objective: To Estimate prevalence of domestic violence and associated risk factors among pregnant women attending the Federal General Hospital, Islamabad.

Study Design: Descriptive cross sectional study.

Place and Duration of Study: This research was conducted in the Federal General Hospital, Islamabad from May 2014 to October 2014.

Materials and Methods: A descriptive cross sectional survey was carried out on 150 pregnant women by employing systematic sampling. Pregnant women without any serious medical complication were selected for study. Standardized, pretested, domestic violence questionnaire based on PDHS 2012-2013 was used to assess domestic violence during pregnancy. A SPSS version 16.0 was used for data entry and analysis. Descriptive analysis of all categorical variables in form of frequencies and percentages along with binary logistic regression was applied.

Results: Overall, (24.3%) women experienced one form of abuse, answering yes to at least one of the five domestic violence questions.

This study demonstrated the educational level of pregnant women; income, parity, year since married and women empowerment were significantly (p<0.001) associated with presence of domestic violence. Parity was a strong predictor of physical abuse (p<0.001; OR=2.8, 95%CI=1.3-3.6).

Women who belong to low socio-economic income (<10,000/month) were at significantly high risk (p<0.001: OR=1.5, 95%Cl=0.9-3.3) of physical abuse as compared to women with middle and high income (20,000-50,00/month).

Conclusion: Prevalence of domestic violence among pregnant women is very high in our part of the world. The statistically significant associated risk factors with the domestic violence are low educational level of pregnant women along with low income, parity, and poor socio-economic status.

Key Words: Domestic Violence, Risk Factors, Pregnant Women.

Introduction

Pregnancy is the time when women are making physical, emotional and social preparedness for motherhood, offers no protection from abuse. For some women pregnancy is the result of their partner's violence towards them. Domestic violence is a public health problem worldwide, and associated

with adverse consequences of pregnancy outcome.¹ It was found that pregnant women are 60.6% more likely to be beaten than women who are not pregnant. Abuse may be continuous, or it may be a single incident of assault. Abuse may be physical, sexual, psychological/emotional, or economic.² During pregnancy, abuse may simply be business as usual, but for some women pregnancy is the trigger of the domestic violence, with male jealousy and anger directed towards unborn baby.3 A violent pregnancy leads to adverse health consequences such as miscarriages, late prenatal care, still birth, preterm birth, fetal injury, low birth weight, mental health problems such as psychosis, post-traumatic stress disorders, suicide attempts anxiety, stress, chronic pain and gynecological problems.4

Compared with those not reporting physical violence, women who did were more likely to deliver by cesarean and be hospitalized before delivery for maternal complications such as kidney infection, premature labor, and trauma due to falls or blows to

Health Services Academy, Islamabad

Regional Training Institute, Multan

³Department of Medicine

Mohtarma Benazir Bhutto Shaheed

Medical College, Mirpur

⁴Department of Medicine

Pakistan Institute of Medical Sciences, Islamabad

Correspondence: Danish Nadeem

Department of Health System Health Services Academy, Islamabad

E-mail: <u>dnadeem55@yahoo.com</u>

Received: October 12, 2015; Accepted: December 13, 2015

^{1,5}Department of MNCH/Health System

⁶Department of Epidemiology and Biostatistics

²Population Welfare Department

the abdomen. ⁵⁻⁶ Determinants of violence during pregnancy, such as socioeconomic status, maternal age, parity, education of wife, unplanned pregnancy, and consumption of alcohol or drugs, are similar to those outside of pregnancy. Women with unwanted pregnancies had 4.1 times odd of having violence during pregnancy then women did planned pregnancy. ¹

Another study from Nigeria shows prevalence of domestic violence was 28.4%. There was positive relationship between domestic violence during pregnancy; non-supervision of pregnancy and poor attendances to antenatal.⁷ A review study indicates that the prevalence of violence during pregnancy ranges from 0.9% to 20.1%.⁸

Known risk factors for violence during pregnancy are maternal age, ethnicity, and low level of education, employment status, parity, smoking, and alcohol and drug abuse. Domestic violence against women is found in the form of physical, emotional, and psychological abuse. Adverse pregnancy outcome associated with violence during pregnancy may result from physical, sexual trauma, indirectly through stress.⁹

A study from Bangladesh found increased education, higher socioeconomic status, non-Muslim religion, and extended family residence to be associated with lower risks of violence. The effects of women's status on violence were found to be highly context-specific.¹⁰

Intimate partner violence is extremely prevalent and relates to unwanted pregnancy and higher rates of pregnancy loss or termination, particularly miscarriages, among Bangladeshi women. Bangladeshi women experienced violence from husbands were less educated, poorer, and Muslim. 9-11 A study from Pakistan show quarter of women (23%) reported physical abuse during their recent pregnancy suggesting a serious social and health problem that is particularly challenging for Pakistani obstetricians. Women experienced verbal abuse during their preceding pregnancy, significantly higher than china and Americas. 12 A study conducted in urban community of Hyderabad shows that 51% women of reproductive age experienced physical, verbal abuse before and during pregnancy. Young maternal age, having an unemployed husband and one with other wives/partners, and having had a

prior pregnancy were significant predictors of abuse. The few studies have been conducted in Pakistan related to women violence in pregnancy and due to social and cultural problems this issue is not discussed with the health care workers. It is very crucial to have an estimate of violence in women during pregnancy especially in Pakistan as violence not only affects the women but also the whole family can be the sufferer due to this issue. The objective of this study was to estimate prevalence of domestic violence and associated risk factors among pregnant women attending the Federal General Hospital Islamabad.

Materials and Methods

A cross sectional survey was conducted in outpatient department of Federal General Hospital. This study spanned over a period of six months from May 2014 to October 2014.

All married pregnant women who visited Gynea OPD at Federal General Hospital Islamabad were included in this study. The women with comorbidities were excluded from this study. The sample size was calculated by using the single proportion formula with 95% confidence interval and 5% margin of error. For 95% CI the value of Z was 1.96. This sample size was based upon 11% estimated domestic violence cases. (PDHS 2012-13)

Sample size based on estimated domestic violence cases 11%

n = z2p(1-p) = 140 + 10% refusal = 150

Systematic sampling technique was used to select the study participants. Every 3rd pregnant woman was included in the sample size of the study.

Domestic violence tool which was adopted for study was adopted from PDHS 2012-2013. The questionnaire comprised of twenty seven questions. After taking consent the respondent was taken to a separate place and her privacy and confidentiality was maintained. A total of 150 respondents were interviewed.

A statistical package, SPSS version 16.0 was used for data entry and analysis. Descriptive summary statistics such as mean, frequencies, and percentages were computed for continuous variables. Ten precent 10% of data was randomly checked to look for possible entry errors. Descriptive analysis of all categorical variables in form of frequencies and percentages and summary statistics

for continuous variables was conducted. Binary logistic regression was done to see the association between domestic violence and factors affecting it. Odd ratio was computed at 95% CI to see the significance. The p-values less than 0.05 were considered significant.

Results

Overall, (24.3%) women experienced one form of abuse, answering yes to at least one of the five domestic violence questions. Of these, 13(8.4%) women had experienced physical violence, 3(1.9%) were subjected to sexual coercion during pregnancy, 21 (14.3%) experienced emotional violence (fear of husband).

Table I: Types of Domestic Violence (n=150)

Type of Domestic violence	Yes	No
Physical Violence	13 (8.4%)	137(91.6%)
Emotional Violence	21 (14.3%)	128(85.7%)
Sexual violence	3 (1.9%)	147(98.1%)
Total	24.3%	75.7%

Nine (69%) out of 13 pregnant women experienced physical violence very often, three (23.03%) out of 13 experienced it sometime, and only one (7.69%) out of 13 experienced it in last 6 months during index pregnancy. Rate of emotional (verbal) abuse was slightly higher than physical abuse. Seventeen (80.9%) out of 21 pregnant women were emotionally abused very often during pregnancy. Sexual abuse was relatively less reported during pregnancy.

Different forms of physical and emotional violence was reported during pregnancy. Physical violence was reported as slap or cut 7(53.8%), cut or bruises 4(30.7%) and in form of deep injuries 2(15.3%); while emotional/verbal abuse was reported as humiliation 5(23.8%), threaten 2(9.52%) and insulted 14(66.6%). Women who participated in this study were relatively young, with an average age of 24 years. Seventy five (48.7%) pregnant women were between age group (20-25), while 55(35.7%) were between (26-29) years, and 13(8.4%) were fall in age group (30-39). only 7(4.5%) were below 20 years of age.

Results shows that 119 (77%) of them were those who were not educated. only 24(15.6%) pregnant women got primary education; while 7(4.5%) women got secondary education. Education status of their husband was relatively better. About 102 (66.2%) of participant's husbands attended

secondary school. Women were mostly housewives 132 (85.7%). Only 12 (7.8%) pregnant women were working. while 6 (3.9%) had other own source of earning. Household income of majority participant 122(79.2%) were in low socio-economic (<10,000/month). Twenty five (16.2%) were those whose household income fall between 10,000-20,000/month. Ninety six (62.3%) women were married from six to ten years; while 39(39.3%) participants were those who were married less than five years and 15(9.7%) were in wed-lock from 11-15 years. More, than half 83(53.9%) women got pregnant 4-5 times, while 38(24.7%) women got pregnant more than five times. only 3(1.9%) women were primygravida. Sixty seven (43.5%) of the participant had (3-4) children, 41(26.6%) had more than five children; while 35(22.7%) women has only 1-2 children. only 7(4.5%) women had no baby at all. One hundred and twenty six (84%) women reported their husband were smoker. While 24(16%) women their husband did not smoke.

In order to see a significant difference in domestic violence and demographic factors chi squire test and binary logistic regression was used.

Women with no education or primary level education were at a significantly higher risk of physical violence, compared to women with secondary level education (p<0.003; OR=3.1, 95%Cl=0.9-4.6). Parity was a strong predictor of physical abuse (p<0.001; OR=2.8, 95%Cl=1.3-3.6).

Odds of experiencing violence were approximately double among women who had been pregnant 4-5 time as compare to Primigravida (p<0.00; OR=2.1.95%CI=1.6-2.8). House wives were at significantly high risk of physical violence compared with working women (p<0.00; OR=1.36, 95%CI=0.62-2.34).

Women who belong to low socio-economic income (<10,000/month) were at significantly high risk (p<0.001:OR=1.5, 95%CI=0.9-3.3) of physical abuse as compared to women with middle and high income (20,000-50,00/month). Women who were married for six to ten years (p<0.013; OR=2.06; 95% CI=0.7-3.1) were at higher risk of being abused than women who were married for less than five. Women whose husband were smoker were at greater risk of being abused as compare to women whose husband were nonsmoker (p<0.00; OR=1.6, 95%CI=0.9-3.1) Table II.

Table II: Risk Factors associated with Domestic violence (n=150)

Variables	Domestic violence			
	Yes n (%)	No n (%)	p-value	OR=95% CI
Age of Mother 15-19Years 20 -25 Years 26-30 Years 31-35 Years 35-39 Years	0 (0.00%) 3 (23.07%) 7 (53.8%) 3 (23.07%) 0 (0.00%)	7 (5.1%) 72 (52.5%) 48(35.03%) 8 (5.8%) 2 (1.45%)	0.001*	2.3(1.1-4.6) 1.4(0.7-2.9)
Maternal education Illiterate Primary Middle Matric or above	11 (84.6%) 2 (15.3%) 0(0.00%) 0(0.00%)	108 (78.8%) 22 (16.05%) 6(4.37%) 1(0.7%)	0.003*	3.1(0.9-4.6) 2.1(1.0-3.3)
Husband education Illiterate Primary Middle Matric or above	3 (23.07%) 3 (23.07%) 5(38.46%) 2(15.3%)	16 (11.6%) 48 (35.03%) 46(33.5%) 27(19.7%)	0.965	0.8(.2-2.3)
Maternal employment House wife Working lady Others	11 (84.6%) 2 (15.3%) 0(0.00)	121 (88.3%) 10 (7.2%) 6(16.05%)	0.00*	1.36(.62-2.34)
Household income Low Middle High	9 (69.2%) 3 (23.07%) 1(7.6%)	113 (82.4%) 22 (16.05%) 2 (1.45%)	0.001*	1.5(0.9-3.3)
Years since married <5 6-10 11-15	10(76.9%) 2 (15.3%) 0 (0.00%)	39 (28.4%) 86 (62.7%) 12 (8.7%)	0.013*	2.06(0.7-3.1)
Number of pregnancies Primigravida 2-3 4-5 >5	1 (7.6%) 0(0.00%) 3(23.07%) 9(69.2%)	2 (1.45%) 26 (18.9%) 80(58.3%) 29(29.1%)	0.00*	2.1(1.6-2.8)
Number of children No baby 2-3 4-5 >5	0 (0.00%) 0 (0.00%) 5 (38.46%) 8(61.5%)	7 (5.1%) 35 (25.5%) 62 (45.2%) 39(28.4%)	0.001*	2.8(1.3-3.6)

p-value less than 0.05 was considered statistically significant. The significant values are having * sign.

Discussion

In this research 13% domestic violence was reported that fall within the range quoted from developing countries. The widespread belief that pregnancy either initiates or increases the risk of violence was

not substantiated in our study, similar to findings from other studies in developing countries. Our findings lend support to screen for domestic violence during pregnancy.

This research showed various demographic factors such as education, parity, marriage duration, maternal employment, and socioeconomic status were associated with increased risk of domestic violence. Domestic violence during pregnancy should be regarded as risk for postpartum abuse. Women in abusive relationship may suffer from psychological problems.

We found that domestic violence most commonly occur between 20-25 age groups. It was explained in one of the research that the phenomenon of domestic violence among pregnant women as a function of the education, domestic violence is common in illiterate or having just primary education and decline by partner education level, our results shows partner education didn't impact violence during pregnancy(p>.987).9

Violence risks were doubled among women with lower (vs. higher) incomes, women who did not receive financial support from partners or family members. 1 Violence was associated with socioeconomic and behavioral factors indicative of financial hardship and social instability. Consistent with the results of studies focusing on pregnant women, our bivariate analyses showed that violence was associated with low incomes, a higher income may be less important than financial support from family or partners and a stable housing situation.

The findings indicated that history of violence in childhood was significantly related to physical and verbal abuse. Girls who observed their mother abused by their father were more likely to assume that violence was natural in their own married life.5Domestic violence against pregnant women was common in its various forms. Interestingly, physical abuse during pregnancy was strongly related to previous experiences, and forms, of domestic violence, suggesting that screening for lifetime physical abuse before the onset of pregnancy can be a good predictor of, and a useful tool for prevention programs concerning abuse during pregnancy.

This study confirmed previous conclusions that the vast majority of women do not object to screening

for domestic violence by health professionals. Referral of women to adjunct social services, parenting support groups, and integration of these types of support with prenatal, postpartum, and pediatric care are also critical.

Our study had several methodological limitations, including its cross-sectional design; possible response bias and under-reporting given the sensitivity of the topic, and the inclusion of women from only one antenatal clinic, and the findings may not be generalizable to other pregnant women in Pakistan or elsewhere. For better assessment of domestic violence, longitudinal cohort studies should be performed to identify past-year exposure at baseline and relevant preventive services, including counseling for safety and domestic abuse concerns.

Conclusion

The prevalence of violence is quite high among pregnant women in Islamabad. This result is just a tip of iceberg. The study identified some factors associated with violence against women, which can be used as foci for intervention strategies that are urgently required to prevent the devastating consequences of domestic violence on women's health.

REFERENCES

- Iliyasu Z, Abubakar IS, Galadanci HS, Hayatu Z, AliyuMH. Prevalence and risk factors for domestic violence among pregnant women in northern Nigeria. Journal of interpersonal violence. 2013; 28: 868-3.
- 2. Drouin R. Domestic violence in pregnancy. 2010.
- 3. Cottrell S. Domestic violence in pregnancy. The Social Context of Birth. 2009; 39: 115-25.
- 4. Murphy CC SB, Myhr TL, Du Mont J. Abuse: a risk factor for low birth weight? A systematic review and meta-analysis. CMAJ. 2001.
- Cokkinides VE, Coker AL, Sanderson M, Addy C, Bethea L. Physical violence during pregnancy: maternal complications and birth outcomes. Obstetrics and gynecology. 1999; 93: 661-6.
- 6. Salazar M, San Sebastian M. Violence against women

- and unintended pregnancies in Nicaragua: a population-based multilevel study. BMC women's health. 2014; 14:26.
- 7. Ameh N, Shittu SO, Abdul MA. Obstetric outcome in pregnant women subjected to domestic violence. Nigerian journal of clinical practice. 2009; 12: 179-81.
- 8. Gazmararian JA, Lazorick S, Spitz AM, Ballard TJ, Saltzman LE, Marks JS. Prevalence of violence against pregnant women. JAMA: the journal of the American Medical Association. 1996; 275: 1915-20.
- 9. Zareen N, Majid N, Naqvi S, Saboohi S, Fatima H. Effect of domestic violence on pregnancy outcome. Journal of the College of Physicians and Surgeons--Pakistan: JCPSP. 2009; 19: 291-6.
- Koenig MA, Ahmed S, Hossain MB, Khorshed Alam Mozumder AB. Women's status and domestic violence in rural Bangladesh: individual- and community-level effects. Demography. 2003; 40: 269-88.
- Silverman JG, Gupta J, Decker MR, Kapur N, Raj A.
 Intimate partner violence and unwanted pregnancy, miscarriage, induced abortion, and stillbirth among a national sample of Bangladeshi women. BJOG: an international journal of obstetrics and gynaecology. 2007; 114:1246-52.
- 12. Fikree FF, Jafarey SN, Korejo R, Afshan A, Durocher JM. Intimate partner violence before and during pregnancy: experiences of postpartum women in Karachi, Pakistan. JPMA The Journal of the Pakistan Medical Association. 2006; 56: 252-7.
- 13. Karmaliani R, Irfan F, Bann CM, McClure EM, Moss N, Pasha O, et al. Domestic violence prior to and during pregnancy among Pakistani women. Acta obstetricia et gynecologica Scandinavica. 2008; 87: 1194-201.
- 14. Nasir K, Hyder AA. Violence against pregnant women in developing countries. Review of evidence. Euro J Pub Health 2003; 13: 105-7.
- 15. Gazmararian JA, Lazorick S, Spitz AM, Ballard TJ, Saltzman LE, Marks JS. Prevalence of violence against pregnant women. JAMA. 1996; 275: 1915-20.
- 16. Stewart DE, Cecutti A. Physical abuse in pregnancy. Can Med Assoc J 1993; 149: 1257-63.
- 17. McNutt J, Carlson BE, Gagen D, Winterbauer N. Reproductive violencescreening in primary care: perspectives and experiences of patients andbattered women. J Am Med Wom Assoc 1999; 54: 85-90.