Domestic Violence, Cause and Consequences on Pregnancy

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Abstract
Domestic violence is a preventable global public health and human rights issue which affects millions of women regardless of age, economic status, race, religion, ethnicity, or educational background worldwide. Women who suffer violence undergo lifelong trauma in the form of physical injury, multiple health problems and even death. Although, women of all age group may experience intimate partner violence (IPV), but it is most common in women of reproductive age and contributes to gynaecological disorders, pregnancy complications, unintended pregnancy, and sexually transmitted infections, including human immunodeficiency virus (HIV). Because of its increasing prevalence, adverse effect on women and child, in recent year more attention is focused on intimate partner violence in pregnancy. Health care providers mainly obstetrician–gynaecologists are in a unique position who can help the women by assessing, diagnosing and providing support for women who experience IPV because of the nature of the patient–physician relationship and the many opportunities of contact for intervention that occur during the course of pregnancy, family planning, annual examinations and other women’s health visits. This study reviews the prevalence of violence in pregnancy, risk factor associated with it and its consequences on pregnancy and baby and various strategies for its diagnosis and prevention. This is most prevalent in developing country ranging between 4% to 29% and worldwide between 1% and 70%, in the form of physical, sexual or psychological violence.[1] In reviewing the main risk factors for violence in pregnancy are low socioeconomic condition, low education of both partner, unplanned pregnancy, nuclear family etc., all leading to low birth weight. Intimate partner violence screening and counselling should be a core part of women’s preventive health visits according to United states, department of Health and Human Services. Screening should be done for all women for IPV at regular intervals periodic intervals, like during obstetric care (at the first prenatal visit, at least once per trimester, and at the postpartum check-up) and , provides support, and review available prevention and referral options time to time . In many communities various resources are available to assist women who experience IPV. The vulnerability of violence in pregnancy and its consequences are major public health issue and call for design and implementation of better preventive strategies.

Keywords: Domestic violence(DV), violence in pregnancy, Intimate partner violence.

Introduction
Intimate partner violence (IPV) can be defined as any assaultive or/and coercive behaviour within an intimate relationship that include physical injury, psychologic abuse, sexual assault, progressive isolation from family members or friends, stalking, deprivation, intimidation, and reproductive coercion that causes physical, psychological or sexual harm to those in the relationship.[1] These acts are generally carried by those who is , was or wish to be involved in an intimate or dating relationship with an adult or adolescent, with the aim of establishment of control of one partner over the other.[1] Violence
against women, especially physical and sexual violence by an intimate partner, has been acknowledged as a serious global public health issue that is present in all social strata, religion and countries of the world. This is one of the leading preventable cause of disability and illness in pregnant women and their children and death. This occurs in the form of physical, sexual, emotional abuse or controlling behaviours. Although most of the studies measure physical violence during pregnancy but sexual, emotional and controlling behaviour also have detrimental effects on mother and the child wellbeing. Emotional and controlling behaviour can be in the form of insulting, humiliating, not allowing meeting family members or friends. The overall prevalence of lifetime experiences of physical and sexual intimate partner violence is estimated to range from 15 to 71%, with 1–28% of women reporting intimate partner violence during pregnancy worldwide.[2,3] Globally, one in three women experiences violence from an intimate partner and South East Asian region (37.7%) witness its highest prevalence.[4] Intimate partner violence during pregnancy is a concern because it is highly associated with serious maternal health effects and adverse foetal outcomes, including anaemia, preterm labour, low maternal weight gain, kidney infection, miscarriage, low birthweight, neonatal death, poor mental health, reproductive disorders, sexually transmitted diseases and other problems.[5,6] The father of the unborn child are responsible for this violence in more than 90% of cases and between one quarter and half of victim had been kicked or punched in the abdomen.[7] The health effects occurring as a consequences of violence can last for years or lifelong and can sometimes consist of permanent physical or mental disabilities and even death. Domestic violence during pregnancy is even more common than pre-eclampsia and placenta previa but it receives much less attention in perinatal care settings.[8] The WHO multi-country population survey on women’s health and violence during pregnancy, conducted in different countries, identified the prevalence rate of violence during pregnancy ranging from 1% in urban Japan to 28% in provincial Peru with majority of places showing between 4% and 12%.[9] Demographic and Health Surveys analysis and the International Violence against Women Survey supported the findings of WHO, which found the prevalence rates for intimate partner violence during pregnancy between 2% in Australia, Denmark, Cambodia and Philippines to 13.5% in Uganda, with the majority ranging between 4% and 9%.[10] According to different Clinical studies done around the world, the highest prevalence of violence in pregnancy is in Egypt with 32%, followed by India (28%), Saudi Arabia (21%) and Mexico (11%).[11] According to recent review of clinical studies from Africa, 23–40% suffer physical violence, 3–27% sexual and 25–49% emotional abuse by the intimate partner during pregnancy.[12] According to a meta-analysis developing country have higher proportion of victims of violence than developed countries (27.7 vs 13.3%).[13] However, these prevalence rates are always underestimated as they are based on self-reporting; with many women preferring to keep their history of violence in silence because of stigma, shame, and fear of retaliation.[14] DV during pregnancy is particularly alarming because of severe negative effects on the physical and mental health and well-being of both mother and child, and its overall effect on family functioning.[15-17] Evidence suggests DV during pregnancy can leads to wider form of mental health problems, such as anxiety, depression, post-traumatic stress disorder (PTSD)[18-19] and persistent episodes of DV exerts severe negative effects on mental health.[20] Similarly, women with mental illness is at risk of becoming a victim of DV.[21-22] It is unclear whether violence leads to mental illness or mental illness leads to violence or both morbidities coexist.[23-24] Our health systems do not have much information and expertise to handle such problems, does not have necessary information to which patients should be referred to submit such conflicts.
Objective
The aim of this review article is to provide an update on these issues, its impact on health of the abused pregnant woman and the baby, strategies for diagnosis and protection against violence on pregnant woman. The information gathered for this review is based on the information obtained from various articles, published in national and international journals.

Justification
As a result of violence against pregnant women, the personal fulfilment and the economic planning of the affected family get modified, the inter and intra-family relationships are altered and environment becomes toxic for proper and comprehensive development for individuals. The prevalence of abuse during pregnancy varies between 4% and 25% depending on different population studied. The attitudes towards violence, can do change the conditions of women, it can and must be improved. Men and women must be convinced that intimate partner violence is not acceptable in a human relationship in any form.

Forms of violence in pregnancy
Violence in pregnancy can be in the form of physical abuse, psychologic abuse, sexual violence, and reproductive coercion.
1. Physical abuse can occur in the form of, pushing, kicking, throwing object, slapping, hitting, beating biting, strangling, threatening with any form of weapon[^1]
2. Psychologic abuse may occurs in the form of harassment, verbal abuse like blaming, stalking, isolation from family and friends, deprivation from food money and health services. All this basically decreases the woman’s sense of self-worth.[^25]
3. Sexual violence occurs in the form of a continuum of sexual activity in the form of unwanted kissing, touching or fondling, sexual coercion and rape.[^26]
4. Reproductive coercion behaviour involve to maintain power and control in a relationship related to reproductive health and can occur in the absence of physical or sexual violence. Deliberately refusal of safe sex practice, or contraception, intentionally exposure of the partner to a sexually transmitted infection (STI) or human immunodeficiency virus (HIV), controlling the outcome of a pregnancy (by forcing the woman to continue the pregnancy or to have an abortion or to injure her in a way to cause a miscarriage), refusal of sterilization, or control the access to other reproductive health services are the various form of reproductive coercion behaviour.[^1]

Is pregnancy itself increase the risk of violence during pregnancy
With pregnancy life of the women completely changed with new expectations, emotions and doubts due to hormonal changes leading to various physiological and psychological changes in the body.[^27] In various literatures, it is described that during pregnancy and after delivery the main function of mother are protecting the child from various traumatic and adverse stimuli, nurture, give love, care, comfort, welfare and pleasure to the unborn and born .According to some authors, pregnancy itself is a itself increases the risk of violence by the partner. Depending on the population studied, definitions of violence, and the methods used to measure it according to a international literature , the prevalence of partner abuse varies between 4% and 25%.[^28-30] and worldwide prevalence is between 1% and 70%. Overall, in developing countries its prevalence is more than in developed countries.[^31-33].According to some authors, pregnancy itself may be the result of intimate partner violence either in the form of sexual or emotional abuse, in the form of denial of using any contraceptive methods for prevention of pregnancy, repeated unwanted pregnancy or unintended termination of pregnancy, recurrent STI/HIV and genitourinary symptoms.[^33,34] About 4% and 12% of women accepted that the main cause of violence is pregnancy in more than 90% of cases and the
unborn child father is responsible for this act and most of time they had been getting injury in the abdomen in the form of punching and kicking.\textsuperscript{[35]} Castro et al., also supported that pregnancy does not stop partner violence. In fact, from having no violence before pregnancy, 9.2\% of women had reported an increase in violence, and 7.7\%, had a decline in violence and even stopped violence at least temporarily during pregnancy. About 27\% women who had experienced violence during pregnancy were not before it, supporting the fact that pregnancy is a triggering factor for violence. trigg.\textsuperscript{[36]} But 24\% of women reported of no violence during pregnancy, who had experienced violence before pregnancy. This supports that pregnancy also sometime functions as a protective factor against violence.\textsuperscript{[28]} Most frequent form of violence by intimate partner encounter before and during pregnancy is psychological, as compared to physical and sexual.\textsuperscript{[37]}

**Risk factors for violence in pregnancy**

Nuclear family, overcrowded environment and low socioeconomic status increase the risk of violence.\textsuperscript{[38]} The risk of physical and sexual violence is more in teenage pregnancy compared to pregnant adults.\textsuperscript{[30,39]} Pre pregnancy violence and violence during previous pregnancy can sometimes increases the chances of violence in more severe forms in women who did not even experienced violence during previous pregnancies.\textsuperscript{[28,30,37,40]} Those women who are atleast educated upto secondary school are less likely to suffer violence by partner during pregnancy than women with no or low educational qualification. Women with planned pregnancy suffer less violence as compared to unplanned pregnancy.\textsuperscript{[28,40]} Prior to the current partner and children from prior partner again increase the risk of violence as compared to those who did not have previously couple and children. Childhood abuse of couple or women further increases the risk of violence. Women whose partner consume high alcohol are at higher risk of violence than women whose husband does not consume alcohol.\textsuperscript{[28,39,40]} It has been observed that working women often suffer more violence than homemakers, may be because of the insecurity in their exercise of power by the work of women.\textsuperscript{[40]} The women undergoing domestic violence get isolated from family and friends, have little interest in personal care, lack autonomous behaviour and decision making behaviour about herself and her baby like planning pregnancy, using contraceptives, adequate nutrition in pregnancy, adequate antenatal and postnatal treatment and preparation for childbirth and motherhood. Unemployment, economic dependency low self-esteem further increases the vulnerability of violence in pregnancy.\textsuperscript{[38]}

**Impact of violence by the partner during pregnancy on health of women and child**

Pregnancy with violence has been associated with fatal and non-fatal health consequences on pregnancy and the in utero developing baby. This effect could be either due to direct trauma on the women or due to various physiological and psychological effects of mental trauma from recent or past violence of the partner. The overall prevalence of intimate partner violence during pregnancy is 10\%. Intimate partner violence may leads to postnatal depression latter on in the life of the child.\textsuperscript{[30, 36, 39, 41, 43]} Prenatal adverse stimuli and antenatal anxiety affect maternal-foetal bonding in postnatal period and affect fetal development in utero that latter on causes short and long-term health problems. Abortion, gestational hypertension, preeclampsia, eclampsia, hyperemesis gravidarum, poor weight gain, intrauterine growth restriction, preterm delivery with its comorbidity, low birth weight, and diseases in adult stages like neuro developmental disorders to metabolic syndrome are commonly seen in violence suffer.\textsuperscript{[40, 38,43-45]} Studies reported that violence during pregnancy also increases the risk of antenatal complications like threatened or induced abortion, antepartum haemorrhage, repeated UTI and STI/HIV infection.\textsuperscript{[35,46]} Repeated physical and sexual violence to the pregnant women increases the risk of child stunting in latter life\textsuperscript{[47]} Violence in pregnancy
decreases the gap between two pregnancy due to lack of contraceptive use and also decrease the effective fetal weight by 454.5gm as compared to women not abused during pregnancy. Violence in pregnancy also increases the risk of substance abuse like alcohol, snuff, addiction. The act of self-medication may be to cope up with the stress, shame and suffering caused by the abusive acts. Delayed prenatal and antenatal care might be because the abusive collaborate preventing from going outside or because of physical injuries women ignoring the visits. The long-term psychological effect of Domestic violence during pregnancy can have long term psychological effect on the psychological development of children, who probably will witness domestic violence consequences after birth. Homicide and suicides are the most fatal outcome of intimate partner violence during pregnancy. According to WHO criteria and ICD-10, intimate partner violence can indirectly cause of maternal death during pregnancy or postpartum period through different mechanisms such as abdominal traumas leading to obstetrical complications like abortion, rupture of uterus which in turn can become lethal latter leading to psychological stress.

**Who, when and how to Screen for violence during pregnancy**

In identifying the women suffer of violence, halting the vicious cycle of women abuse through proper screening, providing ongoing support, time to time reviewing available prevention and referral services medical field play a key role. Health care providers are the first professionals who come in contact with the abused women first. All health care providers should work in collaborated manner for violence assessment as part of routine patient care whether in public health, private health, or self managed caring center.

1. Obstetrician–gynaecologists play a important role to provide assistance in identifying women suffering from violence since they get many opportunities to contact the women like during annual examination, family planning, antenatal and postnatal follow up care.
2. Antenatal care provide a array of opportunity to identify the violence suffer. This is because of the fact that this is the time when pregnant women frequently come in contact with health care provider and this provide an opportunity for discussing her problem with heath care provider.
3. Screening for violence should be started at first prenatal visit, should be done once in each trimester and also in postpartum follow up period. This screen are to be done at various time because in majority of cases women initially donot disclose about violence due to fear of society, family, and felling of shame and lack of confidence over the health care provider.
4. If women violence is suspected in any form like signs of depression, substance abuse, mental health problems, repeated unwanted pregnancy and termination any time during her visit to heath service prompt assessment for violence should be done.
5. All the health care service provider should be aware of prevalence of violence in all sectors of society, risk factors and sign and symptoms of violence, capable of providing appropriate immediate response if issue identified, able to work for its prevention and timely referral for appropriate health service.
6. Women should be screen in a private and safe setting alone and not infront of partner, family members, friends or care giver. Health provider must use only professional terms and not something associated with the patient which make women embarrassing.
7. Screen all women whether any foul play of violence suspected or not, universally and maintain the confidentiality of the discussion.
8. Screening for IPV should be incorporated into the routine medical history of the women by integrating questions into intake forms so that all patients are screened, whether or not abuse is suspected.
9. Printed take-home resource materials like safety procedures, hotline numbers, and referral
information in privately accessible areas such as restrooms and examination rooms. Posters and other educational materials displayed in the office also can be helpful.

10. Ensure that staffs providing health care services at all the level are receive training about IPV and that training is regularly offered.

11. For the development, implementation, and use of routine protocols and procedures for the assessment, identification, and referral of victims of family and intimate partner violence, maltreatment, and neglect emergency nurses can be involved.

Benefits of screening

1. Antenatal care during pregnancy increases the opportunity for awareness, safety planning, ongoing care and support.

2. Decreases the tolerability for domestic violence at both health care provider and patient’s level.

3. Antenatal screening of violence during pregnancy improves the pregnancy outcomes by decreasing abortion, hypertension, abruption, UTI etc and improve the long term health of mother and the child.

Measures for protection against violence on pregnant woman

1. The issue of intimate partner violence should be included in every mother and child related issue.

2. Violence, sexuality and power related issues of women should be included in adolescent, sexual health and HIV/ AIDS prevention policies and programmes.

3. All the health care providers whether he/she is in family planning, prenatal or post natal care and delivery should be trained in diagnosing violence and its health consequences.

4. Health care providers should be trained for how to ask about violence, how to provide minimum response, maintain privacy and confidentiality of the women and where to refer such cases when to identified.

5. Routine screening for intimate partner violence should be included in universal antenatal care.

6. Support and care system should be made for such women when violence is identified.

7. Programs should be made for primary prevention of women violence by using different health services at root level.

8. All the health care providers should be aware of the services for domestic violence in community and if needed can call and provide assistance to the women any time when needed .

9. Powerful and sensitize legal and judicial system should be made for violence suffer.

10. Local antidomestic violence service should be made for suffer for immediate contact.

Conclusion

Violence during pregnancy subvert the integrity of women and directly or indirectly affects the health, family and social group. This is one of the rising problem having no precise data, because most of these acts are hidden inside the wall of our society. Health care provider especially obstetrician and gynaecologist play a very important role in assessing, diagnosing, timely referring the victim of violence to break the vicious cycle of abuse. The lifelong consequences associated with IPV can be prevented by screening for violence if condition that could be cause or complicated by violence is suspected. This could have positive effect on overall health of the women health as well as the baby.

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