ABSTRACT

BACKGROUND: Domestic violence is common worldwide. When it occurs in pregnancy it is associated with maternal and perinatal morbidity and mortality. It is a human rights violation with medical implication which is under-diagnosed and under-reported. This study sought to determine the prevalence of domestic violence during pregnancy and the factors that promotes domestic violence at the family unit.

METHODOLOGY: A cross sectional study of antenatal clients seen at the antenatal booking clinic of the University of Port Harcourt Teaching Hospital from 1st June to 31st December 2007. Five hundred clients selected from a simple random technique completed an interviewer administered structured questionnaire which sought information on domestic violence. Data collected was entered into a spreadsheet and analyzed using the statistical package SPSS 15.00 for Windows.

RESULTS: The prevalence of domestic violence during pregnancy in this group was 7.8%. Those who experienced domestic violence were mainly those with low education and low parity. The commonest form of domestic violence was verbal abuse (shouting, cursing) occurring in 43.5% of those who have been abused in the index pregnancy and 1.2% of the victims of domestic violence suffered physical injuries from domestic violence in previous pregnancies. However, less than one third disclosed the incident. Women whose husbands indulge in substance abuse or are without jobs were more likely to experience domestic violence. Abdominal pain and miscarriage were the commonest obstetric complications following domestic violence in pregnancy in this group.

CONCLUSION: Eight percent of our antenatal mothers suffer domestic violence and many of them are unlikely to report it. Unemployment and substance abuse in the partners are major associated factors. Domestic violence in pregnancy has far-reaching adverse consequence on the mother and her unborn fetus such as miscarriage especially when it occasions bodily harm.

KEY WORDS: Domestic violence, pregnancy, verbal abuse.
Victims of domestic violence tend to have low voluntary disclosure rates for various reasons including, shame, reprisal attack from the perpetrator, domineering influence of the partner and protection of the family name. Disclosure rates will be higher when questions are asked directly (face to face) by the health care provider rather than through a questionnaire. Women who disclose violence require confidentiality, sympathetic and non-judgmental hearing.

When domestic violence occurs in pregnancy it has adverse effects on the health of the pregnant mother and her infant before and after birth. Studies suggest that pregnancy often triggers domestic violence or exacerbates a pre-existing problem, although it can also bring about a reduction in violence. The pattern of violence may change during pregnancy, with assaults directed to the abdomen, breasts and genitals. Women in the peripuerium and pregnant teenagers appear to be at greater risk of violence.

Domestic violence in pregnancy has been associated with placental abruption, chorioamnionitis, miscarriage, still births, low birth weight infants and premature labour. Abdominal trauma during pregnancy may lead to fetal fractures, and rupture of the mother's uterus, liver or spleen, and in extreme cases the violence may result in maternal and or fetal death. Domestic violence can result in psychiatric illness in the victims, such as depression, anxiety, post-traumatic stress disorder and suicide. Predisposing factors identified amongst perpetrators of domestic violence include unemployment, cigarette smoking, alcohol, drug and other substance abuse.

There are no studies at the moment on domestic violence among pregnant women in our center, this study therefore sought to determine the prevalence of domestic violence during pregnancy and the factors that promotes domestic violence at the family unit.

PATIENTS AND METHODS
This is a cross-sectional study carried out among antenatal clients seen at the antenatal clinic of the University of Port Harcourt Teaching Hospital. The required sample size was derived using the formula:

\[ n = \frac{Z^2 \cdot pq}{d^2} \]

where \( z \) is the standard normal deviate, usually set at 1.96 (or more simply at 2.0), which corresponds to the 95% confidence level; \( p \) represents the prevalence of domestic violence set at 50%, \( q \) is 1.0-\( p \) and \( d \) is the margin of error tolerable (or degree of accuracy desired) which is set at 5%. This gave a minimum sample size of 384.

The mothers attending antenatal booking clinic who were at least in the second half of their pregnancy were randomly selected and recruited for the study after explaining the objective of the study and the contents of the questionnaire.

Data was collected using an interviewer administered structured questionnaires between 1st July and 31st December 2007. A total of 565 women were recruited and 500 respondents completed the questionnaire. Information obtained included socio-demographic characteristics, the types of violence and obstetric complications. Partner’s employment status, smoking and alcohol or substance abuse were also assessed.

Data collected was coded and entered into computer spreadsheet using SPSS 15.0 for windows® statistical software which was also used for data management. Results were presented as means with standard deviations, rates and proportions, tables and figures. Cross tabulation was performed to establish relationship among variables. Chi-square tests were carried out where necessary. These were reported when statistically significant at P value of \( \leq 0.05 \). Odds ratio and relative risks were reported when significant.

RESULTS
Thirty nine of the five hundred respondents had suffered domestic violence in the index pregnancy. This puts the incidence of domestic violence in the index pregnancy at 7.8%.

The mean age of the respondents was 29.62 ±4.024 years. The youngest respondent was 18 years and oldest 43 years. Of the respondents, 32.8% were civil servants, while 31.2%, 19.2% and 16.8% were traders/business women, housewives and students respectively. Four hundred and ninety three (98.6%) respondents were married. Three hundred and forty three (68.6%) respondents had tertiary education. Partner’s employment status, smoking characteristics, the types of violence and obstetric complications. Partner’s employment status, smoking and alcohol or substance abuse were also assessed.

Domestic violence in pregnancy has been associated with placental abruption, chorioamnionitis, miscarriage, still births, low birth weight infants and premature labour. Abdominal trauma during pregnancy may lead to fetal fractures, and rupture of the mother's uterus, liver or spleen, and in extreme cases the violence may result in maternal and or fetal death. Domestic violence can result in psychiatric illness in the victims, such as depression, anxiety, post-traumatic stress disorder and suicide. Predisposing factors identified amongst perpetrators of domestic violence include unemployment, cigarette smoking, alcohol, drug and other substance abuse.

Verbal violence (43.5%) was the commonest form of domestic violence in the index pregnancy. This included shouting and/or cursing. Other forms of
violence were physical violence 11.2% (including kicking, pushing, beating) sexual assault 1.8% and economic violence 6.8%. Some of the victims had more than one form of violence. 11.3%, 1.2% and 5.8% of respondents were victims of physical violence, sexual violence and economic violence in previous pregnancies. Some of them had combinations of these forms of violence.

Table 1: Socio-demographic characteristics respondents matched with history of domestic violence in index pregnancy.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>History of domestic violence</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>7</td>
<td>43</td>
<td>86.0</td>
</tr>
<tr>
<td>25-34</td>
<td>30</td>
<td>362</td>
<td>92.3</td>
</tr>
<tr>
<td>35</td>
<td>2</td>
<td>56</td>
<td>96.5</td>
</tr>
<tr>
<td>Parity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>16</td>
<td>218</td>
<td>93.2</td>
</tr>
<tr>
<td>1</td>
<td>13</td>
<td>100</td>
<td>88.5</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>67</td>
<td>89.3</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>52</td>
<td>96.4</td>
</tr>
<tr>
<td>e4</td>
<td>0</td>
<td>23</td>
<td>100</td>
</tr>
<tr>
<td>Educational status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No formal education</td>
<td>0</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>Primary</td>
<td>1</td>
<td>5</td>
<td>83.3</td>
</tr>
<tr>
<td>Secondary</td>
<td>17</td>
<td>132</td>
<td>88.5</td>
</tr>
<tr>
<td>Tertiary</td>
<td>21</td>
<td>322</td>
<td>93.9</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housewives</td>
<td>16</td>
<td>80</td>
<td>83.3</td>
</tr>
<tr>
<td>Civil servants</td>
<td>3</td>
<td>163</td>
<td>98.2</td>
</tr>
<tr>
<td>Traders/Business</td>
<td>12</td>
<td>144</td>
<td>92.3</td>
</tr>
<tr>
<td>Student</td>
<td>8</td>
<td>76</td>
<td>90.6</td>
</tr>
</tbody>
</table>

Table 2 shows that of 500 respondents, 433 (86.6%) of their intimate partners had jobs while 67 (13.4%) had no jobs. The intimate partners without jobs were more likely to engage in domestic violence. Out of 67 partners without jobs, 17 (25.4%) violated their wives, while 22 (5.1%) of men who had jobs did same. (Odds ratio 4.99 at 95% CI, Relative Risk 4.19). Partners of 45 out of the 500 of the respondents (9.0%) engaged in smoking, alcohol or drug abuse. Some of them indulged in more than one. Alcohol abuse was the commonest, followed by smoking and drug abuse. Those who indulged in any of these were more likely to abuse their partners. Seven (15.6%) of husbands who engaged in substance abuse violated their wives compared to 32 (7.1%) of husbands who did not use substances. (Odds ratio 2.21 at 95% CI, Relative Risk 2.05).

Table 2: Some characteristics of intimate partners.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>History of domestic violence</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td>No.</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Employment Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>22</td>
<td>411</td>
<td>94.9</td>
</tr>
<tr>
<td>Unemployed</td>
<td>17</td>
<td>50</td>
<td>74.6</td>
</tr>
<tr>
<td>Substance abuse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(smoking, drugs, alcohol)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>7</td>
<td>38</td>
<td>84.4</td>
</tr>
<tr>
<td>No</td>
<td>32</td>
<td>423</td>
<td>92.9</td>
</tr>
</tbody>
</table>
Table 3 showed the disclosure of domestic violence in previous pregnancies. Out of the 266 respondents who had previously been pregnant, 82 (30.8%) were victims of domestic violence. Only 27 (32.9%) of the victims disclosed the violence while 55 (67.1%) did not disclose. Out of the 27 who disclosed, 5 (18.6%) disclosed to doctors, 9 (33.3%) disclosed to a Pastor or Priest, 10 (37%) disclosed to their family members, 3 (11.1%) disclosed to in-laws and none (0%) disclosed to the police. Reasons for non disclosure showed 49 (89.1%) were afraid of reprisal attack by their intimate partners while 6 (10.9%) did not disclose because of shame and protection of family name.

Table 3: Disclosure of domestic violence

<table>
<thead>
<tr>
<th>Person disclosed to:</th>
<th>No.</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor</td>
<td>18.6</td>
<td></td>
</tr>
<tr>
<td>Religious leader</td>
<td>33.3</td>
<td></td>
</tr>
<tr>
<td>Family / Relatives</td>
<td>37.0</td>
<td></td>
</tr>
<tr>
<td>In-laws</td>
<td>11.1</td>
<td></td>
</tr>
<tr>
<td>Police</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>100</td>
</tr>
</tbody>
</table>

Figure 1 showed obstetric complications following domestic violence. 20 (4%) of those with domestic violence in previous pregnancy had complications in that pregnancy. Abdominal pain was the commonest (45%) followed by miscarriage (40%).

DISCUSSION

The incidence of domestic violence in the index pregnancy in this study was 7.8% while 30.8% of the respondents had domestic violence in previous pregnancies. This was similar to a study in Ibadan which revealed 8.4% prevalence in index pregnancy and 12.4% had domestic violence in previous pregnancy. This was lower than the figures reported in a study in Abuja where 38% had suffered domestic violence. The incidence of domestic violence at booking in this study is 7.8%. Many more women may be assaulted before the end of the index pregnancy. This is responsible for the low incidence usually recorded in the index pregnancy. The incidence at the previous pregnancy is a more correct reflection of the burden of domestic violence as it takes into account all the cases of domestic violence in that pregnancy. Also there may be under reporting as most women may not regard verbal abuse as a form of domestic violence even if listed as an option. Although majority of the victims had verbal violence (43.5%). Verbal violence was demonstrated in form of shouting or cursing. 68.6% of the respondents had tertiary education and the less educated women were more likely to be abused with an odds ratio of 4.1. These patterns were similar to those observed in other studies in the South East Nigeria where up to 52.3% had verbal violence and the less educated women suffered more abuse.

A low level of physical violence (1.2%) was recorded in this study. However verbal attacks are prelude to the more dangerous physical attacks. The incidence of physical violence might increase before term in this group as the level of verbal attack is high. Other studies have reported higher incidences of physical injuries up to 6.9% and physical violence.

The domestic violence disclosure rate was 69%. 31% of the victims did not disclose the attack to anybody. This shows a similar pattern with other studies. Women who fail to disclose the violence usually have one or many reasons for non disclosure. Those who disclosed, did so to family members and pastors than to health practitioners because they don't consider it a medical problem. None was disclosed to the police. This disclosure pattern is similar to the study where less than 1% reported to the police. The women involved would not want their spouses arrested by the police or to press charges against them because of societal male dominance orientation. Majority of those who did not disclose were afraid of reprisal attacks by their partners, societal perception of male dominance, or the shame of discussing their personal affairs publicly.

Intimate partners who indulged in smoking, alcohol or drug abuse were at least two times more likely to abuse their women. This was similar to other studies. The substance abuse may be means of relieving frustrations in life and when partners are under the influence of these substances they may exhibit very low threshold to self restraint and may batter their partners with little or no provocation. The unemployed partners are also four times more likely to abuse their women. This was also noted in other studies. Unemployment and substance abuse may bring about a viscous cycle in which each condition worsens the other. Those in this state of life can become abusive especially in a society little or no punitive measure exists for such offences. The domestic violence occasioning verbal abuse only as were mostly reported here may be thought not significant enough to warrant disclosure by the victims but may progress to more sinister abuse if unattended to as usual the case.

Adverse effects on the pregnancy may be suffered by some of the victims of domestic violence in pregnancy. This has variably been reported in other studies. The respondents in this study associated the adverse effects on their previous pregnancy with the domestic violence they had in that pregnancy. Adverse effects...
such as miscarriages, preterm labour, abdominal pains, preterm rupture of membranes and abruption placenta that occurred in that pregnancy were thought to be as the domestic violence they had in that pregnancy. Although no direct cause and effect has been established, they also cannot be excluded as having caused these adverse effects.

CONCLUSION
Domestic violence is a serious public health issue, which is not only common but also has far-reaching adverse consequences on the pregnant mother and her unborn fetus. It is largely under-diagnosed, with low disclosure rate. Health practitioners should have high index of suspicion for domestic violence. Antenatal units should generate protocols for antenatal screening and education of victims and their partners as well as institute support services for the women with domestic violence. Governments should enact and enforce laws that protect women’s rights in our society especially against domestic violence of any type.

REFERENCES