



## MALE SPOUSE UTILIZATION OF PSYCHOLOGICAL NEGOTIATION SKILLS AND PERPETRATION OF PHYSICAL ABUSE AMONG PREGNANT WOMEN IN NAIROBI, KENYA

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### ABSTRACT

The objective of this comparative retrospective study was to establish whether diagnosis of HIV infection during pregnancy mitigates or exacerbates male spouse perpetrated physical abuse during pregnancy. A modified Conflict Tactics Scale 2 was administered to case group comprising 96 HIV infected pregnant women, and comparison group (96 uninfected), all in their third trimester of pregnancy upon consenting. Results indicated higher prevalence and severity of male spouse perpetrated abuse across both minor and severe physical assault subscales for case than comparison group. The odds of male spouse perpetrated violence was 6.64-fold higher in HIV positive pregnant women than their HIV negative counterparts (OR = 6.64, 95% CI 1.56-28.27, p = 0.010). Utilization of both cognitive and emotional negotiation skills by male spouses of case group deteriorated after diagnosis of couple HIV infection. The investigator recommends intensive couple counseling and follow up care for both concordant positive and discordant couples.

### KEY PHRASES

Gender based violence, HIV, Pregnancy, Psychological negotiation skills, , male spouse-perpetrated violence.

### BACKGROUND AND LITERATURE REVIEW

The World Health Organization emphasizes that there is a lot of ground to cover in order to achieve universal maternal health by 2015 as envisaged by the Millennium Development Goal 5 (MDG 5) especially in Sub-Saharan Africa (WHO 2008). While the medical outcomes of gender based violence (GBV) towards pregnant women are well documented, little research from Kenya has explored the drivers of IPV among pregnant women (Hatcher et al., 2013).

In the context of co-existing GBV and vulnerable groups in the population, the focus of this research study was to establish the effects of diagnosis of HIV infection during pregnancy on male spouse perpetrated violence and utilization of psychological negotiation skills. It is estimated that one in every three women around the globe have been beaten, coerced into sex or otherwise abused in her life (Ocha/Irin, 2005). The public health repercussions of this violence are that women suffer assault, rape, murder, unwanted genital trauma, sexually transmitted infection (STDs), psychological trauma and complication of pregnancy and childbearing amongst others (Ocha/Irin, 2005).

Although the World Health Organization estimates the prevalence of partner perpetrated violence during pregnancy to range between 4% to 32% worldwide, with rates being considerably higher in developing countries (WHO 2004), there is limited documented and published studies on this issue in Africa. In Kenya, 43% of women in the reproductive age of 15-49 years reported having experienced some form of gender-based violence in their lifetime, with 29% reporting an experience in the previous year. Some 16% of these girls and women reported having ever been sexually abused, with 13% of them reporting this to have happened in the last one year (KDHS, 2003).

In rural Ethiopia, 49% of ever-partnered women reported to have ever experienced physical violence by an intimate partner, rising to 59% ever experiencing sexual violence (WHO, 2006). In rural Tanzania, 47% of ever-partnered women have ever experienced physical violence by an intimate partner, while 31% reported to have ever experienced sexual violence (WHO, 2006). The UNFPA (2007) reported that in England and Wales, 40-60% of women experiencing domestic violence are abused during pregnancy and that 30% of all domestic abuses start during pregnancy.

Studies from diverse settings such as China, Peru, the USA, and Uganda have found that girls and women who have previously experienced sexual coercion are significantly less likely to use condoms, and more likely to experience genital tract infection symptoms, unintended pregnancy and a higher incidence of unsafe abortion (Gazmararian et al., 1995; Campbell et al, 2004). Lack of sexual autonomy and control stemming from actual or threatened violence, together with fear of repercussion from use of condoms or contraception, are direct pathways to unwanted pregnancy and increased risk of STIs (Kishor & Johnson, 2004).

Moreover, intimate partner violence has been found to be independently associated with HIV infection (Siemieniuk et al., 2010; Schechter et al., 2011). This is because not only have most sexual violence been found to be unprotected, but also vaginal lacerations and trauma increase the risk of transmitting the virus (Jansen et al., 2002). Victims of violence are more likely to engage in risk behaviors, such as injection drug use, which increase the risk of exposure to HIV (Abdool, 2001; Choi et. al., 1998; Gilbert et. al., 2002; Wyatt et. al., 2002). As observed earlier intimate violence has been shown to be a risk factor for STIs, which, in turn, may increase the rate of HIV transmission (Thompson et al., 2002). Victims of violence are often unable to negotiate the use of a condom (Campbell et al, 2004; Davila and Brakley,

1999; Wingood and Clemente, 1997). Furthermore, proposing the use of condom may increase a woman's risk of being exposed to violence by her uncooperative partner. (Gielen et al., 2000). Several authors have indicated that violence or fear of violence may keep women from HIV testing and that violence may occur as a consequence of testing (Gielen et al., 2000; Heise et al., 2008; Maman et al., 2002).

The World Health Organization emphasizes that there is a lot of ground to cover in order to achieve universal maternal health by 2015 as envisaged by the Millennium Development Goal 5 (MDG 5) especially in Sub-Saharan Africa (WHO 2008). The WHO indicates that among the indirect causes that contribute to 20% of maternal deaths are diseases that complicate pregnancy such as malaria, anaemia and HIV. As observed earlier intimate violence has been shown to be a risk factor for STIs, which, in turn, may increase the rate of HIV transmission (Thompson et al., 2002). Furthermore violence against women may result in unwanted pregnancy either through rape or by affecting a woman's ability to negotiate contraceptive use (WHO, 2008). Unwanted pregnancy before girls are biologically and psychologically sexually mature is associated with adverse health outcomes for both the mother and child. Research shows that the leading cause of death for 15 – 19 years old girls worldwide is complications from pregnancy and childbirth. Further, women are also vulnerable to contracting Sexually Transmitted Diseases (STDs) and HIV/AIDS because they are unable to negotiate for protection (WHO, 2006).

Violence usually goes by unnoticed. This is partly because people visiting health care services will rarely disclose spontaneously that they have undergone or carried out a violent act. Reasons for this are multiple. For instance, it is an unpleasant experience which the person feels uncomfortable remembering. Also a person experiencing domestic violence can be persuaded to introject the notion that she has suffered the violence because it is necessary or they deserved it.

## **SPECIFIC OBJECTIVES**

1. To compare HIV infected and uninfected pregnant women in utilization of psychological cognitive negotiation skills by their male spouses.
2. To compare HIV infected and uninfected pregnant women in utilization of psychological emotional negotiation skills by their male spouses.
3. To compare HIV infected and uninfected pregnant women in occurrence of male spouse-perpetrated physical assault.

## **STUDY DESIGN AND METHODOLOGY**

This study utilized a comparative retrospective research design that collected and analyzed quantitative data. The study was carried out within the city of Nairobi, the capital town of Kenya. Nairobi had a population of slightly over 3 million people according to the 2009 census (Central Bureau of Statistics, 2009). Nairobi city was chosen as the area of study because of its size (being the largest city in the country) and its geographical location (being approximately central) and its heterogeneous composition which is considered more representative of most of Kenya's ethnic and cultural groups compared to any other town in the country.

Within the city, the participants were recruited from two hospitals, namely the Kenyatta National Hospital (KNH) and Pumwani Maternity Hospital (PMH). These two hospitals were chosen because KNH is the major national public referral, teaching and research hospital in the country, while PMH is the largest maternity hospital in Kenya which also provides clinical teaching opportunity to both public and private tertiary educational institutions in Kenya.

In these two hospitals, a total of 96 HIV infected and 96 uninfected pregnant women who were attending for various antenatal services were traced. A modified Conflict Tactics Scale 2 (Murray et al, 2003) was administered to the sample to capture issues of spousal psychological and sexual violence.

Pregnant women had to fulfill all of the following inclusion criteria;

1. Be in the third trimester of pregnancy (i.e. 7<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> month gestation)
2. Lived with her current male spouse for at least one year prior to commencement of this study.
3. Both herself and her spouse had known their mutual HIV statuses (as diagnosed by the hospital's screening tests) for at least four months prior to commencement of this study.
4. That her HIV status and that of her spouse were tested during the current pregnancy.
5. Both herself and her spouse had known about the presence of current pregnancy for at least four months prior to commencement of this study.
6. Gave informed voluntary consent to participate in the study

The completed and cleaned questionnaires were numbered and coded for ease of handling. Data was entered using STATA version 12 computer software. The data was analyzed using percentages, ratios, mean, standard deviation, correlation coefficient, chi square test and logistic regression analyses.

## **ETHICAL CONSIDERATIONS**

The authority to conduct this research was obtained from the Ethic and Research Committees of the Kenyatta National Hospital and Pumwani Maternity Hospital. Confidentiality of study participants was ensured throughout the execution of this study. All the information obtained was used only for the purpose of this study. Study participants were required to give their own individual voluntary informed consent of participation in this study. For participants under the age of 18 years, both themselves and their parent or legal guardian gave consent.

## **RESULTS AND DISCUSSION**

### **Demographic Characteristics of Study Participants**

The table 1 below depicts the demographic characteristics of study participants

**Table 1.** Demographic characteristics of participants

Demographic characteristic	HIV status		Chi square value	P value
	Positive	Negative		
<b>Age in years</b>				
19 yrs and below	7(7.3%)	7(7.3%)	0	1.00
20-24 yrs	23(24.0%)	15(15.6%)	2.10	0.15
25-29 yrs	18(18.8%)	30(31.3%)	4.0	0.046
30-34 yrs	22(22.9%)	22(22.9%)	0	1.00
35-39 yrs	15(15.6%)	10(10.4%)	1.15	0.28
40yrs and above	11(11.5%)	12(12.5%)	0.05	0.82
<b>Religion</b>				
Catholic	49(51.0%)	53(55.8%)	0.33	0.56
Protestant	23(24.2%)	27(28.1%)	0.43	0.51
Muslim	15(15.8%)	13(13.7%)	0.17	0.68
Traditional	9(9.5%)	3(3.2%)	NA	NA
<b>Education level</b>				
No formal education	9(9.4)	11(11.5%)	0.22	0.64
Primary school	16(16.7%)	14(14.6%)	0.16	0.69
Secondary school	42(43.8%)	50(50.1%)	1.34	0.25
College certificate	11(11.5%)	14(14.6%)	0.41	0.52
College diploma	12(12.5%)	5(5.2%)	3.16	0.08
Bachelors degree	5(5.2%)	2(2.1%)	NA	NA
Masters degree	1(1.0%)	0(0%)	NA	NA
<b>Monthly income</b>				
Own earnings	8(8.3%)	5(5.2%)	0.74	0.39
Spouse earnings	26(27.1%)	15(15.6%)	3.75	0.05
Combined earnings	62(64.6%)	76(79.2%)	5.04	0.03
<b>Employment status</b>				
Formal	22(22.9%)	22(22.9%)	0	1.00
Informal	48(50.0%)	62(64.6%)	0.66	0.44
Unemployed	26(27.1%)	12(12.5%)	6.43	0.01
<b>Marital status</b>				
Civil	13(13.5%)	7(7.3%)	2.0	0.16
Customary	30(31.3%)	30(31.3%)	0	1.00
Religious	29(30.2%)	30(31.5%)	0.02	0.88
Cohabiting	24(25.0%)	29(30.2%)	0.65	0.42

## DISCORDANCE AMONG STUDY PARTICIPANTS AND THEIR SPOUSES

This study established existence of couple discordance in terms of HIV statuses of partners. Thirteen (13.5%) of HIV infected pregnant women had male spouses that were HIV negative. Similarly, 4 (4.2%) of HIV negative pregnant women had spouses that were HIV positive. The difference between the case and comparison groups in terms of HIV status discordance of spouse was significant ( $p < 0.001$ ).

The phenomenon of HIV status discordance among sexual partners is not new. Records of recent unpublished studies at the Comprehensive Care Centre of the Kenyatta National Hospital indicate that HIV discordance rates could be higher than previously thought, with discordance rates of 10% having been recorded. It is very important that such couples adhere to HIV prevention practice diligently, such as proper and consistent use of either male or female condom to ensure protection during sexual intercourse. This will protect the HIV negative partner from getting infected. Even in situations where couple HIV positive concordance exists, consistent and proper use of condom should be maintained to ensure that cross-infection with new clades of the Human Immuno-deficiency virus does not occur between the couple.

The investigator also observed that several pregnant women could not be included in the sample due the refusal of their male spouses to undergo routine antenatal HIV testing together with her as is required by the hospital protocol. In fact, the researcher observed some instances where, upon couples being requested to be screened for HIV, the male spouse walked out of the antenatal clinic, and some dragged their pregnant spouses along to seek services elsewhere. This observation is in tandem with the finding of a study in Zimbabwe by Shamu et al (2012). In that study, it was established that men refused to take HIV test but expected to infer their HIV status from their partner's results. Participants and health workers reported that men saw having a baby was a way of knowing their own HIV status through their partner's HIV test result at the antenatal clinic.

## SELF REPORT ON OWN HIV STATUS

When asked what their HIV status was, 3(3.1%) participants in the case group disputed that they were HIV positive. In fact, one participant indicated that she is HIV negative while 2 indicated that they did not know their HIV status.

The current protocol for HIV testing requires that pre-test and post test HIV counseling is administered to the client by a qualified VCT counselor. This was observed to be done to pregnant women attending both PMH and KNH. This implies that pre-test and post-test counseling sessions not withstanding some pregnant women who were found to be HIV

positive still required further follow up and counseling during subsequent antenatal visits. This could go a long way in addressing the defense mechanism of denial that was being employed by these 3 participants in dealing with anxiety caused by diagnosis of HIV infection.

As postulated by Kubler-rose (1969), diagnosis of serious conditions leads to grief reaction that is characterized by various stages. These sequential stages are denial, anger, bargain, depression and lastly, acceptance. Clients/ patients need to be facilitated by counselors so that they can negotiate these stages successfully so as to attain the healthy stage of acceptance of their condition.

When case group participants were asked when they first came to know about their HIV positive status, majority (n=88, 91.7%) indicated that they learnt of it during the current pregnancy. It was observed that 8 (8.3%) participants in case group knew of their HIV positive status before the current pregnancy and in spite of this, they still got pregnant. They also indicated that they had not disclosed the same to their male spouses. While it is appreciated that all persons have a right to self- determination in so far as reproductive health is concerned, further future research could be conducted to establish specific reasons that motivate or lead to pregnancy in already diagnosed HIV positive status of women and their spouse.

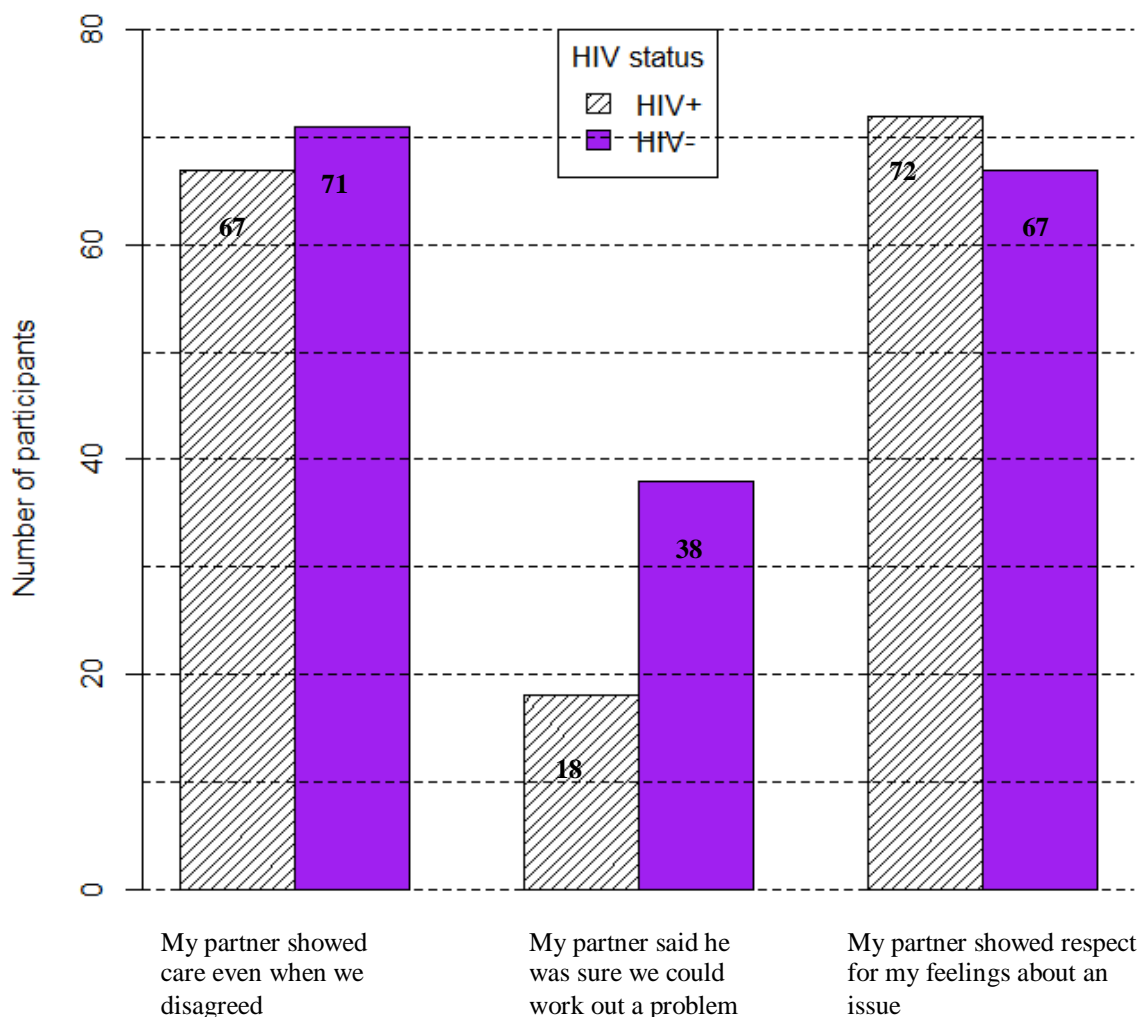
### PSYCHOLOGICAL NEGOTIATION SKILLS

Psychological negotiation comprised of actions taken to settle a disagreement through discussion. This study evaluated both cognitive and emotional negotiation skills. Research on marital conflict and communication has shown that the emotional tone of discussions e.g. whether positive or negative is strongly linked to marital stability (Gottman et al, 1995; Noller and Fitzpatric, 1990).

### EMOTIONAL NEGOTIATION

Emotional subscale was meant to measure the extent to which positive affect was communicated by asking about expression of feelings of care and respect for the partner. The information used to compare the case and comparison groups was captured by 3 questionnaire items. These items asked whether the male partner had; showed care for his female partner though they had disagreed, showed respect for her feelings about an issue, and whether he was sure that they could work out a problem.

The endorsement of these items was as depicted in the figure 1 and table 2 below;



**Figure1: Endorsement of Emotional Negotiation**

When participants who endorsed these items were asked whether it had increased or decreased since the couple’s knowledge of pregnancy and HIV status, their response is as shown in Table 2 below;

**Table 2: Reported frequency of emotional negotiation item after couple’s knowledge of pregnancy and HIV status**

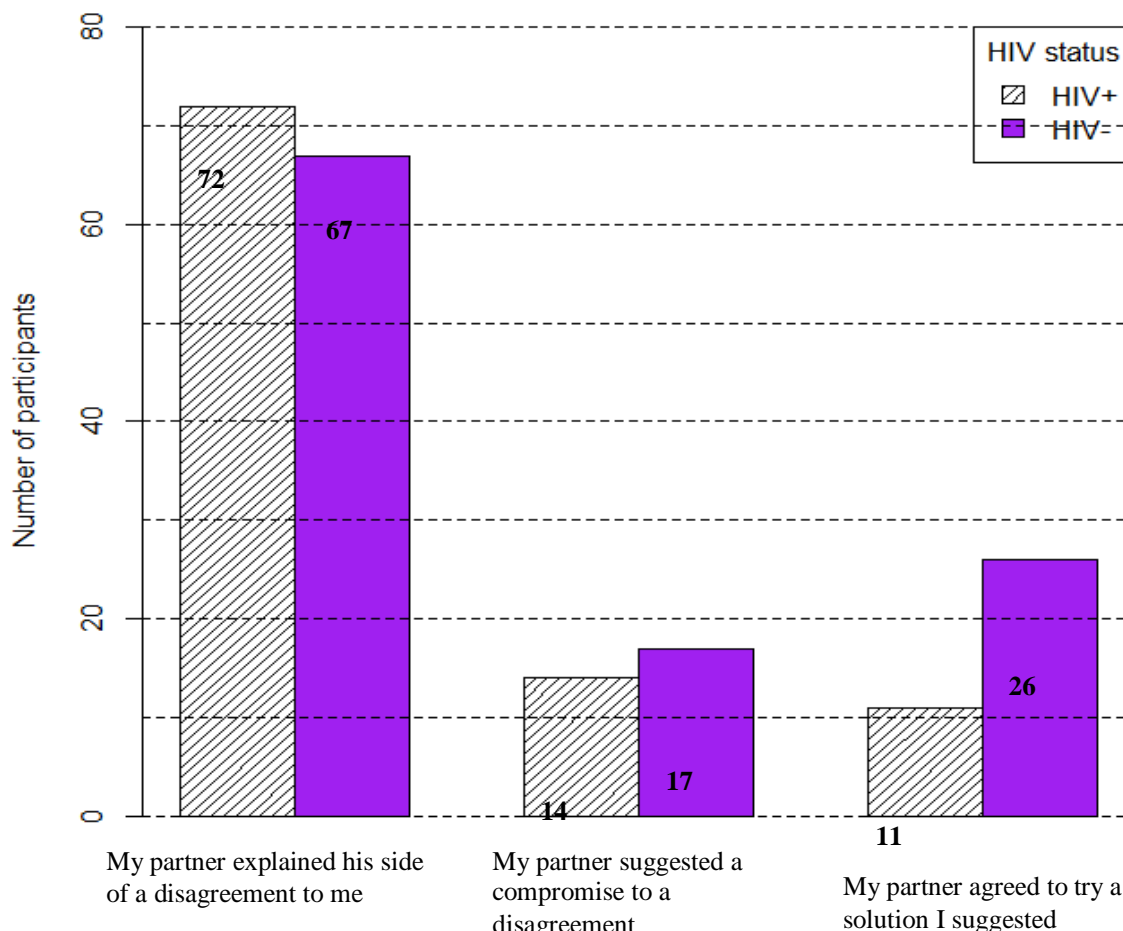
Item	HIV positive		HIV negative		$\chi^2$	P value
	Increased	Less	Increased	Less		
My partner showed care for me even though we disagreed	18(18.8%)	49(51.0%)	58(60.4%)	13(13.5%)	41.9	<0.001
My partner showed respect for my feelings about an issue	22(22.9%)	50(52.1%)	42(43.8%)	25(26.0%)	14.4	<0.001
My partner was sure we could work out a problem	8(8.3%)	10(10.4%)	28(29.2%)	10(10.4%)	4.5	0.03

As depicted in Figure1 and Table2 above, although the case group (HIV positive pregnant women) reported higher score (74% vs. 65%) than comparison group when asked whether her partner showed respect for her feelings about an issue, further analysis revealed that 50 (about half) of these indicated that it was actually a decrease since the couple’s knowledge of the pregnancy and their HIV statuses. Conversely, only 25(26.0%) of HIV negative pregnant women reported that it was a decrease.

As to whether her partner showed care for her though they had disagreed, and that he was sure they could work out a problem, the case group scored lower than the comparison group. When asked whether there was an increase or decline in the 3 emotional negotiation items since the couple discovered the pregnancy and their HIV statuses, HIV positive pregnant women had higher scores for decline while the comparison group had higher scores for increase. These differences between case and comparison groups in the 3 emotional negotiation items were found to be significant (p< 0.001, p< 0.001 and p=0.03 respectively).

**COGNITIVE NEGOTIATION**

Three questionnaire items captured the information on cognitive negotiation subscale. These items enquired whether the male partner had; explained his side of disagreement , suggested a compromise to a disagreement, and whether he had agreed to try a solution that had been suggested by his female partner. The endorsement of these items was as depicted in the Figure 2 and Table 3 below;



**Figure2: Endorsement of Cognitive Negotiation**

When participants who endorsed these items were asked whether the same had increased or decreased since the couple’s knowledge of pregnancy and HIV status, their response is as shown in table 3 below;

**Table 3; Reported frequency of cognitive negotiation after couple’s knowledge of pregnancy and HIV status**

Item	HIV positive		HIV negative		$\chi^2$	P value
	Increased	Less	Increased	Less		
My partner explained his side of a disagreement to me	22(22.9%)	50(52.1%)	42(43.8%)	25(26.0%)	14.4	<0.001
My partner suggested a compromise to a disagreement	8(8.3%)	6(6.3%)	5(5.2%)	12(12.5%)	2.4	0.12
My partner agreed to try a solution I suggested	2(2.1%)	9(9.4%)	13(13.5%)	13(13.5%)	NA	NA

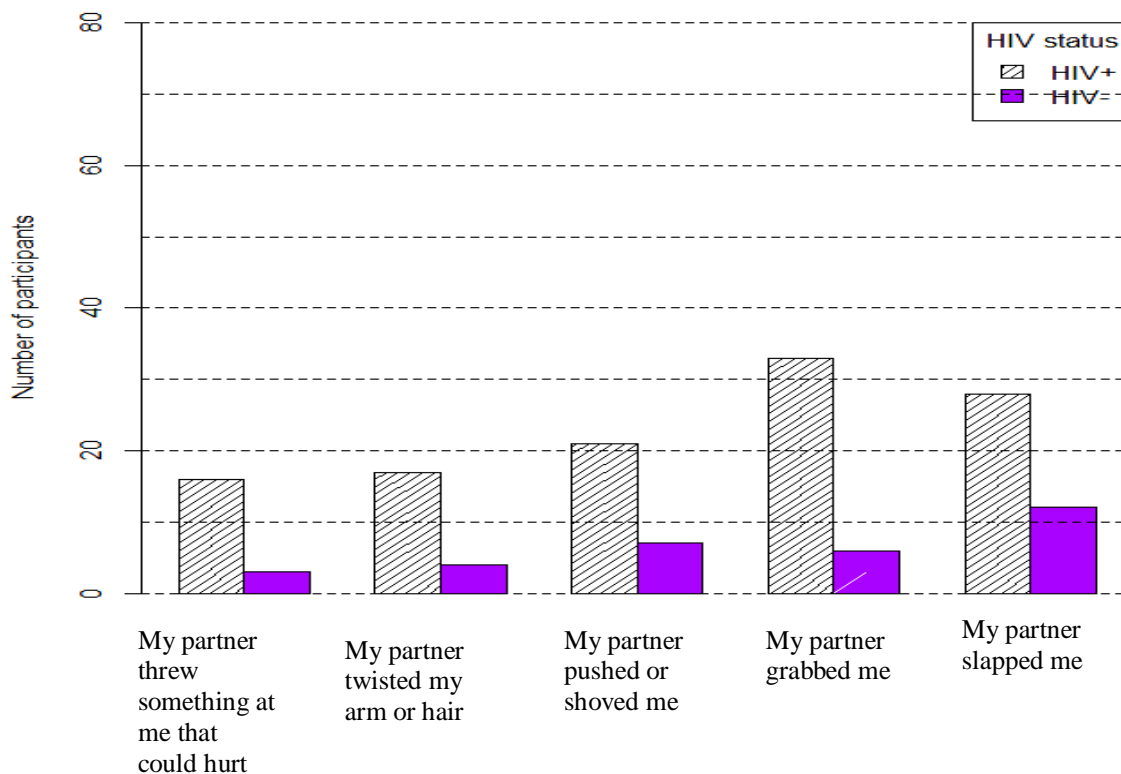
As illustrated in the figure 2 and table 3 above, although majority of participants (75% case group and 70% comparison group) endorsed that their spouse had explained his side of a disagreement, majority (52.1%) of HIV positive pregnant women indicated that this was a decline in their male spouse attribute since knowledge of the pregnancy and their HIV statuses. In contrast, 43.8% of HIV negative pregnant women reported that there was an increase of this attribute of their male spouse explaining their side of a disagreement since they learnt of their pregnancy and their HIV negative status. This difference between the case and comparison group was found to be significant (p<0.001).

The endorsement levels were found wanting in both groups for items that enquired whether the male spouse had suggested a compromise to a disagreement (14.6% case group and 17.7% comparison group, and that he had agreed to try a solution she had suggested (11.5% case group and 27.1% comparison group).

Kenya, as is the case in many other countries is largely a patriarchal community where traditional social norms support male superiority and entitlement. This coupled with gender norms that place the male gender at the helm of households and other socio-economic and political institutions implies that he will be unwilling, and sometimes it is not expected of him to take stances that could portray subordination to the female gender. This could explain why male spouse of study participants was willing to explain to his spouse his side of a disagreement, which could even afford him a chance to use rationalization defense mechanism, than to either suggest a compromise to a disagreement or agree to a solution suggested by his female spouse.

**PHYSICAL ASSAULT  
MINOR PHYSICAL ASSAULT**

Information on the subscale of minor physical assault was obtained through questionnaire items that enquired whether the participant’s male spouse had; thrown something that could hurt to her, twisted her arm, pushed or shoved her, grabbed her, and whether he had slapped her. The findings on endorsement of these items are as depicted in figure 3 and tables 4 and 5 below;



**Figure3: Endorsement of minor physical assault according to HIV status**



**Table 4: Endorsement of minor physical assault items according to HIV status**

Item	HIV positive		HIV negative		$\chi^2$	P value
	Once more	or Not happened	Once more	or Not happened		
My partner threw something at me that could hurt	16(16.7%)	80(83.3%)	3(3.1%)	93(96.9%)	NA	NA
My partner twisted my arm or hair	17(17.7%)	79(82.3%)	4(4.2%)	91(95.8%)	NA	NA
My partner pushed or shoved me	21(22.9%)	75(78.1%)	7(7.3%)	89(92.7%)	8.2	0.004
My partner grabbed me.	33(34.4%)	63(68.8%)	6(6.3%)	90(93.8%)	23.5	<0.001
My partner slapped me	28(29.1%)	68(70.8%)	12(12.5%)	84(87.5%)	8.1	0.04

When participants who endorsed these items were asked whether it had increased or decreased since the couple's knowledge of pregnancy and HIV status, their responses are as shown in table 5 below;

**Table 5: Reported frequency of minor physical assault after couple's knowledge of pregnancy and HIV status**

Item	HIV positive		HIV negative		$\chi^2$	P value
	Increased	Less	Increased	Less		
My partner threw something at me that could hurt	15(15.6%)	1(1.0%)	1(1.0%)	2(2.1%)	NA	NA
My partner twisted my arm or hair	17(17.8%)		3(3.1%)	1(1.0%)	NA	NA
My partner pushed or shoved me	10(10.4%)	11(11.5%)	3(3.1%)	4(4.2%)	NA	NA
My grabbed me.	23(24.0%)	10(10.4%)	4(4.2%)	2(2.1%)	NA	NA
My partner slapped me	16(16.7%)	12(12.5%)	7(7.3%)	5(5.2%)	0.01	0.94

Results indicated that more HIV infected pregnant women had been subjected to all five forms of minor physical assault by their male spouse (endorsement range of 16.7% to 34.4%), than HIV negative pregnant women (3.1% to 12.5%). These differences were significant for their male partner having pushed or shoved her (p 0.004), grabbed her (p< 0.001) and slapped her (p=0.04). As to whether the assault had worsen or decreased after the couple's discovery of the pregnancy and their HIV statuses, most HIV infected women who had endorsed their occurrence indicated that these abusive behaviors by her male spouse had gotten worse.

The prevalence of minor physical assault among all study participants regardless of their HIV status was 15.4%. However, when participants were categorized according to their HIV status, pregnant women living with HIV infection had a prevalence of 24%, while that of pregnant women who were negative was 6.7%. This finding concurs with that of Campbell, (2002), Jewkes et al., (2002), Muhajarine, (1999) who had found physical abuse to be occurring in approximately 4 percent to 15 percent of pregnant women.

## SEVERE PHYSICAL ASSAULT

Information on severe physical assault was captured by items that asked whether the participant's male partner had; used a knife or gun on her, punched or hit her with something that could hurt, choked her, slammed her against a wall , beat her up, burned or scalded her on purpose, and whether she had been kicked by him. The results were as shown in tables 6 and 7 below;

**Table 6: Endorsement of severe physical assault items according to HIV status**

Item	HIV positive		HIV negative	
	Once more	or Not happened	Once more	or Not happened
My partner used a knife or gun on me	0(0.0%)	96(100.0%)	0(0.0%)	96(100.0%)
My partner punched or hit me with something that could hurt	12(12.5%)	84(87.5%)	2(2.1%)	94(97.9%)
My partner choked me	11(11.5%)	85(88.5%)	1(1.1%)	95(99.0%)
My partner slammed me against a wall	6(6.3%)	90(93.7%)	1(1.1%)	95(99.0%)
My partner beat me up	4(4.2%)	92(95.8%)		96(100%)
My partner burned or scalded me on purpose	2(2.1%)	93(97.9%)	0(0%)	96(100.0%)
My partner kicked me	4(4.2%)	92(95.8%)	1(1.0%)	95(99.0%)

When participants who endorsed these items were asked whether it had increased or decreased since the couple's knowledge of pregnancy and HIV status, their responses are as shown in table11 below;

**Table 7: Reported frequency of severe physical assault after couple's knowledge of pregnancy and HIV status**

Item	HIV positive		HIV negative	
	Increased	Less	Increased	Less
My partner used a knife or gun on me	0	0	0	0
My partner punched or hit me with something that could hurt	12(12.5%)		1(1.0%)	1(1.0%)
My partner choked me	10(10.4%)	1(1.0%)	1(1.0%)	
My partner slammed me against a wall	5(5.2%)	1(1.0%)	1(1.0%)	
My partner beat me up	4(4.2%)			
My partner burned or scalded my partner on purpose	2(2.1%)			
My partner kicked me	3(3.1%)	1(1.0%)	1(1.0%)	0(0%)

Results showed that none (0.00%) of the participants had been assaulted by her spouse with a knife or gun. Twelve HIV infected pregnant women reported to have been hit with something that could hurt by her spouse, compared to 2 in the comparison group. Eleven percent (n=11) of case group compared with 1% (n=1) of comparison group had been choked by their male partners, while a further 6% (n=6) of case group and 1% (n=1) of comparison group had been slammed by their male partner against the wall. Four percent (n=4) of HIV infected pregnant women reported to have been beat up by their partners. Two (2%) of the case group had been burned or scalded by their male partners on purpose, while 4 (4%) case group compared with 1 (1%) of comparison group had been kicked by her partner.

Nearly all participants who endorsed these items on severe physical assault indicated that it had gotten worse after the couple discovered the pregnancy and their HIV statuses. Severe physical assault actions are grievous to both physical and psychological health, hence the community needs to take commensurate preventive and retributive actions

Overall, the case group comprising of pregnant women living with HIV infection consistently reported higher prevalence of male spouse perpetrated across both minor and severe physical assault subscales. Further, it was observed that 8 (8.3%) participants in case group knew of their HIV positive status, though they had never told their spouses, before the current pregnancy, and in spite of this they still went ahead to get pregnant. While the investigator found this perplexing, it was not surprising given the fairly high prevalence of male spouse perpetrated GBV among this group.

While making a recommendation for conduct of further future research on this finding, the investigator postulates that spouse perpetrated violence and fear of such violence could be the underlying factor. Thus, the assertion by Gielen et al., (2000); Heise et al., (2008); Maman et al., (2002) that violence or fear of violence may keep women from HIV testing, and that violence may occur as a consequence of testing could hold true for this finding. Moreover, intimate partner violence has been found to be independently associated with HIV infection (Ghanotakis et al, 2012). This is because not only have most sexual intercourse encounters in abusive circumstances found to be unprotected, but also vaginal lacerations and trauma increase the risk of transmitting the virus (Jansen et al., 2002).

## CONLUSSION

Diagnosis of HIV infection during pregnancy appears to escalate the occurrence and severity of male spouse perpetrated physical abuse of female spouse, and at the same time compromises utilization of psychological negotiation skills by the male spouse.

## RECOMMENDATIONS

Healthcare workers attending to pregnant women should immediately be sensitized on the escalative effect of couple or spouse HIV positive diagnosis on male-spouse perpetrated gender based violence on pregnant women. Intensive couple counseling and follow up care need to be specially designed and implemented for such couple whether they are concordant positive or discordant.

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