THE NEGATIVE ROLE OF HUSBANDS/MALE PARTNERS IN THE UPTAKE OF HIV TESTING BY THEIR WIVES/PARTNERS - A Zimbabwean Study

Wilbert Bara

Assignment presented in partial fulfillment of the requirements for the degree of Master of Philosophy (HIV/AIDS Management) at Stellenbosch University

Study leader: Prof JCD Augustyn
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Declaration

I, the undersigned, hereby declare that the work contained in this assignment is my own original work, and that I have not previously, in its entirety or in part, submitted it at any university for a degree.

Signature:

Date:
Abstract

The decreased uptake of HIV Testing by women when their husbands, or partners, know of the intention to do the HIV Test is a practical problem that was being addressed in this research paper. The between-participants questionnaire survey research design was used. Focus Group Interviews were contacted with homogenous group of women. One was at a Suburban Local Clinic with a group of nurses. Another focus group discussion was at a Suburban District Office with a group of People Living with HIV/AIDS. The discussions were done to inform a questionnaire for the questionnaire instrument. Statistical testing was applied on the data for significance testing. The research revealed that men decrease the tendency of their wives, or partners, to take up HIV Testing.
Opsomming

Die studie ondersoek die fenomeen van afname in toetsing by mans/vrouens indien hulle metgeselle reeds die MIV toets ondergaan het. ’n Vraelys is gebruik en die fokusgroep tegniek is gebruik om data in te samel. Data is statisties verwerk en dit blyk dat mans die sondaars in hierdie verband is.

Voorstelle ter verbetering van die stand van sake word gedoen en suggesties word gelaat vir die beter gebruik van vrywillige toetsing vir MIV in Zimbabwe.
Introduction

The awareness of a man of the intention of his wife or female partner to have an HIV Test has been noted to be associated with a negative tendency to HIV Testing by the woman. This problem has been noted at the family practice and primary care clinics where the author has provided medical services in Harare, Zimbabwe. Similar trends were confirmed during discussions with colleagues. The author felt strongly that this problem must be researched on because the uptake of HIV Testing by women is a core mitigating effort in the fight against the HIV/AIDS pandemic. Prevention of Transmission from Parent to Child (PPTCT) is a programme included on National Strategic Plan of Zimbabwe like in many other countries with strategies against the HIV/AIDS epidemic.

Research Objectives

1. To establish whether the negative effect of men on uptake of VCT services by women really exists.
2. To find out why and how the above observed negative effect of men occurs.
3. To focus on gender imbalance as a determinant of the HIV/AIDS pandemic.

Literature Review

Decision-making is a central skill that must be expressed when it comes to knowing the HIV status of oneself. The gender imbalance between men and women is a central drawback that expresses itself in the negative influence of men on the women’s level of HIV Testing. The traditional role of men has blinded even traditional leaders in communities to the plight of the women especially in risky relationships like polygamy. David Chakuchichi (Chairman of Zimbabwe Open University’s HIV and AIDS Committee), in a leading news agent, IRIN, reports that the traditional leaders said there was no proven research that women in these relationships (polygamous and 'nhaka' - wife
inheritance) had a problem of HIV infection risk. Abdou Faye of Health Senegal reported that women have found themselves at the heart of the pandemic's risk pool and that the number of women living with HIV/AIDS is on the rise. Any deterrents to determination of the extent of HIV infection among the women must therefore be addressed.

In the same edition, Abdou Faye quoting Dr. Ibra Ndoye- the Executive Secretary of the National Council Against AIDS, has alluded further to the lack of power by women in decision-making processes even on personal matters. The doctor points out that woman generally don't have much say in their sexuality in the home. As such it is not surprising that the noted tendency not to test for HIV infection in the absence of the men’s permission has been registered in the clinics as a practical problem deserving more scientific investigation. In HEALTH Colombia Maria Isabel Garcia writing about Elizabeth Torres, an HIV/AIDS activist, acknowledges the fear and reluctance to do HIV Testing. Indeed men’s negative push in dissuading their wives or partners from knowing their status is partly a result of justified fear of a dreadful disease. Torres, as a social scientist, was quoted advising that “since there are so many fears surrounding HIV/AIDS, the most effective thing is unity among all of us who live with the disease”. Men need to come together with women and utilise the VCT services.

The negative role of men in uptake of VCT services by women is further compounded by the subservience of women to men as highlighted by Szulik and Zamberlin when they focus on social and institutional vulnerability of women because they consider the individual to be subsidiary to the two in the Report entitled “To be a woman, To be A Risk.” The above literature study added to the empirical practical observations made in the doctor’s clinics as men negatively influence the uptake of HIV Testing services by women hence giving impetus to the research.
Research Problem and Hypotheses

Research Problem
Does the awareness by the men of the intention by their female partners to have an HIV Test decrease the uptake of the HIV Test by the women?

Operationalising the Research Problem

Awareness by the husbands:
A woman informing a husband, or male partner, before she decides to have blood taken for HIV Test.

Uptake of the HIV Test by women
Answering ‘False’ to survey questions
‘He will reject/divorce me’ and/or
‘His family will accuse me of being unfaithful’.
This operational definition of the concept followed insight from FGDs with the women.

H1: Scientific Hypothesis
The awareness by the men of their female partners’ intention to take an HIV Test results in a decreased uptake of HIV Testing by women.

H0: Null hypothesis
The awareness by men of their female partners’ intention to take the HIV Test does not result in a decrease in the uptake of HIV Testing by the women.
Research Methodology

Research Design
The between-participants questionnaire survey research design was done. Focus Group discussions were contacted to inform the questionnaire. Questionnaire forms were administered to study participants in the City Health clinics where they received their routine primary health care. The participants were asked to complete the forms and to hand it back to the research assistants. The research assistants were tutored and trained on selection of participants, procedure for consent, and aiding the participants to complete the forms. The forms were collected and kept for data analysis.

Sampling
Convenient sampling was done to choose the two City Health clinics and one secondary school as clusters for the survey.

Participant Selection
The participants for the Focus Discussion Groups were chosen from among volunteers from the selected sites. The FGDs were publicized to all nurses of the clinic. All nurses who were present on duty attended the session. All members of the PLWA Support Group who were present on the day attended the FGD. The selection criteria for the FGD were of homogenous persons with common characteristics and minimal inhibitions to communication.

Adult women judged by the physical appearance were approached for consent and completion of the questionnaire forms. Systematic sampling where the first eligible participant was selected was used. Then a fifth woman, or the next who consented to the survey, was selected. The sampling frame of five participants was used till all participants were interviewed.
Participant Study Group Assignment

Control Group.
Comprised the women who indicated that they would decide about HIV Testing by themselves without consulting/informing the husband.

Study Group
Comprised the women who indicated that they would want to make the decision about taking the HIV Test after consulting the husband/male partner on the HIV Testing.

Study Procedures:

A. Focus Group Discussions
B. Questionnaire Survey

Focus Group discussions

Study Team Formation
A team of 4-6 researchers was put together by the principal investigator. The team was chosen from the nurses working at Mt Pleasant Satellite Clinic in Harare. The team met to elect the focus discussion leader/moderator through a secret ballot.

Selection of Focus discussion team-leader
The team leader was expected to hold qualities and skills for leading a focus discussion. The list of the required attributes of the team leader was adapted from available contemporary literature on Focus Group Discussions. The research team read together the requisite attributes which they considered in voting for the leader. A secret ballot was used to vote.
Listing of Focus group themes and subtopics
The team brainstormed on the important themes and subtopics for the focus discussions. These were listed and sorted in the order in which they would be put forward for discussion.

Focus group participant selection
Two focus group discussion sessions were done. The first discussion was done with a group of nurses at a clinic. The second discussion was done with a local Support Group of People Living with HIV/AIDS (PLWA) who met weekly at a local District Administration board room. The focus group participants for both groups were homogenous in gender, profession and employment grade for the nurses, while the PLWA shared the same concerns and issues surrounding living with HIV/AIDS.

Informed Consent
The participants were informed verbally about the purpose of trying to explore the area of HIV Testing and its interplay with male-female relationships, marriages and gender.

Participant compensation
- Participants were paid transport costs and participation money for their participation.
- The Focus Group Team members paid an agreed amount for their time and participation.
- Teas were provided and sponsored by the Principal Investigator.

Focus Discussion Process
- Suitable venues that suited the social disposition of the focus discussion participants were chosen.
- Participants were invited to the venue.
• The discussions were led by the facilitator/team-leader.

Recording of the Focus Group Discussions
Paper and pencil note taking was used to record the discussion sessions.

Use of Focus Discussion results
The records were read and analysed for major thematic areas. These were used to generate questions and variables for the survey form.

Questionnaire Survey Procedure:
• The participants were introduced to the study and the questionnaire form.
• Verbal informed consent was obtained from the participants.
• The form was given to each participant to complete.
• The participants were informed that they had ten to fifteen minutes to complete the forms after which the researchers would collect the forms.
• The participants were encouraged to ask for assistance on unclear or hard to understand questions.
• All participants were thanked for taking time to complete the study questionnaire, and for taking part in the study.

Ethical Considerations
• Informed consent was obtained from study participants.
• Names of participants in Focus Group discussions and the questionnaire survey were kept confidential.
• Research data was be kept safe in the computer with password protection.
• Participants were thanked for taking part in the study and paid for travel.
Control Techniques

There was a control group of research participants. Research selection bias was minimised by the systematic selection of questionnaire survey participants as they make their natural visits to the clinics and to the secondary school.

Data Collection:

Data was collected through a pen and paper recording of the Focus Group Discussions. Questionnaire forms were then formulated and given to participants who completed them. These were collected by the research assistants soon after they were completed by the participants.

Research Results

The results of the research comprised information recorded from the two Focus Group Discussions, and descriptive and inferential statistics following the questionnaire survey. An alpha level of 0.05 percent was used in the statistical analysis. Stata9 statistical package was used to analyse the data.

The Focus group sessions brought to light the important thematic areas that defined the negative influence of male-female relationships and dynamics on HIV Testing. Majority of participants held more than average KAP on HIV/AIDS issues. Composite interesting data was recorded on marital status or being in a relationship which theme had to be included in the survey. The other themes were disclosure of decision to test for HIV, disclosure of HIV results, role of the institution of marriage or male-female relationship, the role of culture and traditions, gender and women’s rights, matters to do with women’s education and their economic dependency on the men.

The demographic characteristics of the study participants were recorded as contained in Table 1.
The participants were all women in their reproductive ages. The mean age was 30.2 years with a standard deviation of 6.8 for the participants who reported not testing for HIV due to the presence of the male factor. The mean age of the women who would test for HIV despite the male factor was 30.6 years with a standard deviation of 7.2. Among married women, 23 would be prevented against 49 who would not be prevented from taking the HIV test, with 31.9% and 68.1% respectively. The participants were predominantly married.

Only a small number of participants were illiterate (education level of grade seven and below). Of the literate 35.4% would be prevented from testing for HIV, against 64.6% who would not be prevented.
The mean age of the male partners was 33.1 years and 34.3 years for the prevented and ‘Not prevented’ categories respectively. The same partners were largely literate. 67.2% of partners would not be prevented from HIV testing and were married to literate men, whereas 32.8 percent were married to literate men and would be prevented from testing. It appeared literacy of men was protective against prevention from HIV testing.

The participant responses were further categorised into reasons or mechanisms for the negative role of men on uptake of HIV testing.

The results are shown in Table 2.
Table 2: Mechanisms by which Men prevent Women from testing for HIV infection.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Prevent</th>
<th>Not prevent</th>
<th>$\chi^2$</th>
<th>p value</th>
<th>Odds Ratio (CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talk about HIV issues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>10 (83.3)</td>
<td>2 (16.7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>16 (23.9)</td>
<td>51 (76.1)</td>
<td>16.3</td>
<td>&lt;0.001</td>
<td>15.9 (2.8 – 157.6)</td>
</tr>
<tr>
<td>Fear of VCT By men</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>23 (46.9)</td>
<td>26 (53.1)</td>
<td></td>
<td></td>
<td>5.5 (1.5 – 24.6)</td>
</tr>
<tr>
<td>No</td>
<td>4 (13.8)</td>
<td>25 (86.2)</td>
<td>8.8</td>
<td>0.003*</td>
<td></td>
</tr>
<tr>
<td>Relative reject women</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>23 (88.5)</td>
<td>3 (11.5)</td>
<td></td>
<td></td>
<td>93.9 (16.4 – 632.1)</td>
</tr>
<tr>
<td>No</td>
<td>4 (7.5)</td>
<td>39 (92.5)</td>
<td>50.8</td>
<td>&lt;0.001</td>
<td></td>
</tr>
</tbody>
</table>

* P value based on Fischer’s exact test

The main themes that emerged from Table 2 are: communication on HIV/AIDS issues in relationships, fear by men to be tested for HIV infection, and the powerful negative effect of men’s family on women’s decisions on testing for HIV infection.
83.3% of the women who reported not talking openly to their partners about HIV/AIDS issues would be prevented from testing for HIV, against 16.7% who would not be prevented. Of the relationships where couples talk about HIV issues only 23.9% would not test against 76.1% who would test. Communication was found to be a supportive factor on uptake of HIV Testing by women in relationships with a p value < 0.001.

Where men had no fear testing for HIV there was a proportionate increase in women who would test for HIV, which was 86.2% against 13.2% who would not test. Where men were afraid the differences in the effect on testing behaviour of women seemed small. Fear of testing for HIV was significant in preventing women from testing for HIV with a p value = 0.003, at $\alpha = 0.05$ level of significance.

Of the women who reported possible rejection by the men’s family as reason for non-disclosure of HIV positive results, 88.5% would not test for HIV, against 11.5% who would not be prevented. Out of the women who did not report the possibility, only 7.5% would be prevented against 92.5% who would not.

Men related factors were analysed individually with the outcome of either preventing testing or not preventing testing for HIV. The results were analysed testing for chi square, p- value and Odds Ratio. The results for the most influential factors in terms of preventing HIV testing were presented in Table 3.
Table 3: Reasons Men prevent Women from testing for HIV.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Prevent</th>
<th>Not prevent</th>
<th>$\chi^2$</th>
<th>p value</th>
<th>Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(CI)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Don’t trust Motive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>14 (58.3)</td>
<td>10 (41.7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>13 (24.1)</td>
<td>41 (75.9)</td>
<td>8.6</td>
<td>0.003</td>
<td>4.4 (1.4 – 13.9)</td>
</tr>
<tr>
<td>Men makes Most decisions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>18 (50)</td>
<td>18 (50)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>9 (21.9)</td>
<td>32 (78.1)</td>
<td>6.6</td>
<td>0.010</td>
<td>3.6 (1.2 -10.4)</td>
</tr>
<tr>
<td>Non supportive Partner</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>10 (66.7)</td>
<td>5 (33.3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>15 (23.4)</td>
<td>49 (76.6)</td>
<td>10.5</td>
<td>0.001</td>
<td>6.5 (1.7 – 27.6)</td>
</tr>
<tr>
<td>Men need education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>25 (40.3)</td>
<td>37 (59.7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>2 (11.8)</td>
<td>15 (88.2)</td>
<td>4.8</td>
<td>0.042*</td>
<td>5.1 (1.0 – 48.7)</td>
</tr>
</tbody>
</table>

Of the women whose partners mistrusted their motive for going for HIV testing, 14 (58.3%) would be prevented against 41.7% who not. Where the motive was not mistrusted 41 (75.9%) would test, against 13, or 24.1% who would not. Not trusting the motive for testing was significant with $p = 0.003$ and $\chi^2 = 8.6$. 
An equal or indifferent effect was observed where men made most decisions. However where women responded that men did not make most decisions only 9% would be prevented against 32 (78.1%) who would not. Decision making roles was significant with a p value = 0.010.

Of the participants who reported non supportive men as reasons for non-disclosure of HIV positive results, 66.7% would not test for HIV against 33.3% who would. Of those women in supportive relationships 49 (76.6%) would go ahead and test. Men’s support and care was significant with a p value of 0.001 and an Odds Ratio of 6.5.

That men need more education on HIV/AIDS issues to support uptake of HIV testing by women was a weak factor with a p value of 0.042 just below the $\alpha$-level of 0.05 when compared to the other factors.

Table 4: Frequency distribution of Independent variable (exposure to men)

<table>
<thead>
<tr>
<th>Exposure</th>
<th>Freq.</th>
<th>Percent</th>
<th>Cum.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>34</td>
<td>43.04</td>
<td>43.04</td>
</tr>
<tr>
<td>1</td>
<td>45</td>
<td>56.96</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>79</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

Key: 0 = No Prevention of HIV testing
1 = Prevention of HIV testing.
More women were exposed to male partner awareness of intention to test for HIV than the ones who were not exposed. Thus 45 or 56 percent were exposed against 43 percent who were not.

**Hypotheses Testing**

H1: Scientific hypothesis: $H_1: M_1 > M_2$:
The awareness by the men of their female partners’ intention to take an HIV Test results in a decreased uptake of HIV Testing by women.

H0: Null hypothesis: $H_0: M_1 = M_2$;
The awareness by men of their female partners’ intention to take the HIV Test does not result in a decrease in the uptake of HIV Testing by the women, where $M_1$ is the mean of the group of women who were exposed to the male factor who were prevented from testing for HIV, whereas $M_2$ is the mean of the group of women who were unexposed to the male but who were prevented from testing for HIV. Since $H_0$ was one sided a one-tailed Independent Samples t-Testing significance testing was done.

$M_1$ and $M_2$ were computed from the responses obtained from presence of male factor (independent variable) versus presence or absence of prevention of HIV Testing effect (independent variable) as shown in Table 5 below.
### Table 5: Effect of Men on HIV Testing Decisions of Women

<table>
<thead>
<tr>
<th>Variable</th>
<th>Prevent HIV Testing</th>
<th>Not Prevent HIV Testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure to Male Factor</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>1. Marital Status</td>
<td>44</td>
<td>4</td>
</tr>
<tr>
<td>2. Partner Support</td>
<td>39</td>
<td>6</td>
</tr>
<tr>
<td>3. Planning Life Together</td>
<td>40</td>
<td>4</td>
</tr>
<tr>
<td>4. Help Suspect Own Status</td>
<td>36</td>
<td>8</td>
</tr>
<tr>
<td>5. Talking about HIV</td>
<td>37</td>
<td>7</td>
</tr>
<tr>
<td>6. No talking about HIV</td>
<td>18</td>
<td>26</td>
</tr>
<tr>
<td>7. Men Makes most Decisions</td>
<td>25</td>
<td>19</td>
</tr>
<tr>
<td>8. Men Fear HIV Testing</td>
<td>28</td>
<td>16</td>
</tr>
<tr>
<td>9. Women tell testing Decision</td>
<td>43</td>
<td>2</td>
</tr>
<tr>
<td>10. Women tell HIV +ve result</td>
<td>36</td>
<td>2</td>
</tr>
<tr>
<td>11. Men need more education</td>
<td>36</td>
<td>8</td>
</tr>
<tr>
<td>12. Men Care of Partner</td>
<td>43</td>
<td>8</td>
</tr>
<tr>
<td>13. Accuses Partner of infidelity</td>
<td>35</td>
<td>12</td>
</tr>
<tr>
<td>14. Men Stop Women from VCT</td>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td>15. Men Reject/Divorce Partner</td>
<td>13</td>
<td>31</td>
</tr>
<tr>
<td>16. Uplift women’s rights</td>
<td>38</td>
<td>28</td>
</tr>
<tr>
<td>17. IEC benefit Women &gt; Men</td>
<td>25</td>
<td>18</td>
</tr>
<tr>
<td>18. Women tested &gt; Men</td>
<td>9</td>
<td>36</td>
</tr>
<tr>
<td>19. Men power &gt; Women power</td>
<td>29</td>
<td>16</td>
</tr>
<tr>
<td>20. Rejection by Men’s Family</td>
<td>19</td>
<td>25</td>
</tr>
</tbody>
</table>
### Table 6: Summary statistics on data in Table 6.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Prevent HIV Testing</th>
<th>Not Prevent HIV Testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure to Male Factor</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Totals of responses per group</td>
<td>∑X = 623</td>
<td>234</td>
</tr>
<tr>
<td></td>
<td></td>
<td>382</td>
</tr>
<tr>
<td></td>
<td></td>
<td>293</td>
</tr>
<tr>
<td>Means:</td>
<td>31.15</td>
<td>11.70</td>
</tr>
<tr>
<td></td>
<td>19.10</td>
<td>14.65</td>
</tr>
<tr>
<td>∑X² =</td>
<td>21391</td>
<td>3981</td>
</tr>
<tr>
<td></td>
<td>975</td>
<td>6135</td>
</tr>
<tr>
<td>Sample sizes</td>
<td>N = 31</td>
<td>N = 12.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N = 19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N = *(12)15</td>
</tr>
</tbody>
</table>

Key: 1 = Awareness of man about HIV testing intention of woman.

0 = Lack of awareness of man about HIV testing decision of woman.

The total response to the survey was the sum of the individual sample sizes or 77 women. A total of 50 women were exposed while 25 were not exposed to the awareness of their decision to go for HIV testing by their male partners.

Of the 50 women who were exposed to the male factor 31, or 62 percent, would be prevented from testing for HIV. The other 38 percent or 19 women would still test despite the awareness of their male partners. 27 women were not exposed to the male factor. Of these 15 or 55.6 percent, would still not test for HIV infection, while 12 or 44.4 percent would test.

The results can be summarised in a 2 x 2 table in Table 7.
Table 7: Male/Partner awareness versus Outcome on HIV Testing by women.

<table>
<thead>
<tr>
<th>Male Awareness</th>
<th>Prevented</th>
<th>Not prevented</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposed</td>
<td>31</td>
<td>19</td>
<td>50</td>
</tr>
<tr>
<td>Not exposed</td>
<td>12</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td>34</td>
<td>77</td>
</tr>
</tbody>
</table>

The standard deviations of the groups of women were calculated. Standard deviation for the exposed and prevented women denoted $s_{ep}$, was:

$$s^2_{ep} = \frac{21391 - 623^2}{50} = \frac{21391 - 38929}{50} = \frac{21391 - 38929}{50 - 1} = 278.13$$

$$s_{ep} = \sqrt{278.13} = \sqrt{278.13} = 16.68$$

The standard deviation of the exposed and not prevented denoted $s_{enp}$ was:

$$s^2_{enp} = \frac{9756 - 382^2/19}{19-1} = \frac{9756 - 382^2/19}{19-1} = 115.3216$$

$$s_{enp} = \sqrt{115.3216} = \sqrt{115.3216} = 10.74$$

The standard deviation of the exposed and prevented women is bigger than control group. More variability exists among the exposed group in their tendency to test for HIV infection.

The standard deviation of the unexposed and prevented denoted $s_{up}$, was:

$$S^2_{up} = \frac{6135 - 293^2/15}{15-1} = \frac{6135 - 293^2/15}{15-1} = 29.4095$$

$$s_{up} = \sqrt{29.4095} = \sqrt{29.4095} = 5.42$$
Again the standard deviation of this control and prevented group is much smaller than the study and prevented group. The difference between the means of the study and control groups is 31.15 – 14.65 or 16.5. The latter approximates the mean of the study group.

The standard deviation of control (unexposed) and unprevented group denoted $s_{ueup}$, was

$$S^2_{ueup} = \frac{3981 - 234^2/12}{12-1} = -52.9091.$$  This is a negative variance and is maybe a result of very small scores in this group. Many scores were single digits and probably insignificant.

**Hypotheses Testing**

H0 will be tested by applying the Independent Samples t-Test on

Exposed prevented versus unexposed prevented:

$$t = \frac{31.15 - 11.70}{\sqrt{\frac{(21391-623^2/31 + 6135-293^2/15 (1/31 +1/15))}{44}}} = 2.45$$

The critical value of t from tables of critical values is such that: 1.671 < $t_{critical}$ < 1.684.

The exposure to awareness by men is likely to prevent by 2.45 more times the HIV testing by their female partners than prevention when there was no male partner awareness.
Since the critical value of $t$ is bigger the actual value of $t$, $H_0 (M_1=M_2)$, is rejected and $H_1 (M_1>M_2)$ is confirmed. This supports the alternative hypothesis that men reduce HIV testing by their female partners.

**Exposed unprevented versus unexposed unprevented.**

$$t = \frac{19.10-14.65}{\sqrt{\frac{9756-382^2/19 + 6135 – 293^2/15}{(1/19+1/15)}}} = 1.46, \quad 32$$

whereas $t_{\text{critical}} : 1.684 < t_{\text{critical}} < 1.697$.

**Discussion**

The study sought to establish and explain the perceived negative effect of male partners on HIV Testing by their female partners. The Focus Group Discussions provided objective indicators of thematic areas to include in the survey. Construction of the questionnaire instrument used insight from the FGD as well as from literature study.

The between participants survey was done whereby the group of women who admitted to presence of male awareness formed the study group. This group showed increased prevention from HIV testing by men. The control group comprised women who denied presence of the male awareness about their HIV testing decisions. They showed increased tendency towards HIV testing decisions.

The study confirmed the research problem that the men have negative influence on uptake of HIV Testing by women. The t value of exposed versus unexposed women was 2.45 against a critical value of t less than 1.684. This caused rejection of the null hypothesis and confirmed the alternative hypothesis. This
meant that exposure to the male partner awareness of intention to test for HIV infection would cause a decrease in HIV testing 2.45 times more than if the women were not affected by male awareness.

The mean of the unexposed and unprevented group was 14.65 and less than the mean 19.10 of the exposed and unprevented group. This was a paradoxical effect which could be attributed to the smaller numbers hence the mean of women who were free the male factor.

The high level of men’s awareness of HIV Testing decisions of women was shown in Table 4 where 56.96 or 45 women were exposed against 43 percent or 34 women who were not. The negative effect of men was highlighted by the standard deviations of the scores about the means in the various cohorts. The exposed and prevented women had a standard deviation \( \text{sep} = 16.68 \), while the exposed and unprevented women had a standard deviation \( \text{senp} = 10.74 \). There was a higher standard deviation in the exposed women which meant a higher within group variation than the control group. This could be attributed to the effect of awareness of men on women’s decisions.

There was a smaller standard deviation, \( \text{sup} = 5.42 \), among the unexposed and prevented women, while that of prevented, \( \text{sup} \), was presumed small due a negative variance. The difference between the means of the study group 31 and 19 was 12. This was closer to \( \text{sep} = 16.68 \) the within group variability in exposed and prevented. The presence of the men’s awareness was associated with increased within group variability. This again offered support to the hypothesis that men decrease HIV Testing by their female partners. A number of independent factors were found to be stronger than the other among the themes tested by the survey as indicated by low p values in Table 2 and Table 3. Men had the negative effect on women through not talking about HIV/AIDS issues in the relationship, with \( p<0.001 \) with an Odds Ratio of 15.9. This meant that the women who did not talk about HIV issues with their partners were nearly 16
times more prevented from testing for HIV than their counterparts. Fear for HIV Testing by men with \( p\)-value = 0.003, men’s paranoia of women’s HIV testing motive, increased decision making power of men over women, lack of partner support and perceived lack of IEC by men on HIV/AIDS issues. The fear of rejection of the woman by her in-laws was particularly important determinant of preventive effect of men with \( p\) value<0.001 and Odds Ratio of 93.9.

Conclusions and recommendations

Men have been shown to prevent HIV Testing by their female partners when they are aware of the intention to have the HIV Test. The important determinants of the preventive effect have been shown to be poor communication between partners, distrust between partners about testing motives, negative attitudes and behaviour of men on HIV/AIDS, increased power of men over women in decision making processes, fear of rejection by the women’s in-laws, and low levels of women’s rights in society.

HIV/AIDS prevention efforts should focus on gender dynamics that affect uptake of HIV Testing services in order to increase awareness of HIV status by communities. Men have been shown to prevent women from HIV testing through a number of constituent forces which should be specifically addressed. Men should discover their central roles in homes and relationships with women and lead the effort to test for HIV infection. Men’s fears on HIV testing should be eradicated through targeted education, information, and communication strategies on HIV/AIDS. Awareness of women’s rights in the homes should be promoted. Women need to be empowered to make decisions on HIV Testing. Communication about HIV Testing and sexuality should be promoted through such efforts as marriage counseling. Disclosure of HIV Testing intentions and HIV Test results should be fostered through promotion of HIV/AIDS prevention awareness. Men should be considered in the design of HIV/AIDS prevention and care programmes in order to improve their buy-in and participation in HIV Testing.
services. Advocacy work and specific IEC strategies should be targeted at trying to shift the attitudes and roles of men to be more permissive towards their wives when deciding to test for HIV.
References.


