THE IMPACT OF HIV AND AIDS COURSE ON STUDENTS’ BEHAVIOUR:
A CASE STUDY OF BINDURA UNIVERSITY OF SCIENCE EDUCATION (BUSE), ZIMBABWE

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ABSTRACT
The study sought to find out the impact of the HIV and AIDS course on students’ behavior at Bindura University of Science Education. From a target population of 338, a 30 % (101) sample was chosen using stratified and random sampling methods. Data was collected using questionnaires and focus group discussion. The study revealed that students have high levels of knowledge. Students believe the course had a positive impact on their sexual behavior. But evidence from the study show that some students are still involved in risky sexual behavior as they battle with influences of peers, financial problems, growing up and looking for happiness. Of particular concern is the problem of trust which leads students to stop using preventive measures. In his theory of social reflexivity Giddens cautions people about the relationship between trust and risk. Students believe the HIV and AIDS course is important for them but suggest improvement in the way it is taught. A comparative study is recommended to find out if there are differences between students studying HIV and AIDS education as a core and examinable course and those who study it but are not examined.

Keywords: Impact, HIV and AIDS, sexual behavior, trust, risk.

INTRODUCTION
Human Immunodeficiency Virus (HIV) and Acquired Immune-Deficiency Syndrome (AIDS) have been a threat to human life for almost three decades worldwide. The number of people living with HIV has risen from around eight (8) million in 1990 to thirty three (33) million today (United Nations AIDS (UNAIDS) Report, 2008). HIV and AIDS were first detected in Zimbabwe in 1985. Since then, the Government of Zimbabwe and other organizations have joined hands to disseminate HIV and AIDS information to people on how to control the spread of the disease.

In order to control the spread of HIV and AIDS, the government initiated the teaching of HIV and AIDS from primary schools to tertiary level. Of concern, despite these efforts, HIV infection continues to spread (Ministry of Health and Child Welfare, 2004). This report further shows that the age range from 15 to 49 years is the worst affected. The majority of university students fall in this age group. In Zimbabwe around 50% of the people with HIV are infected at the stage of adolescence to young adulthood (UNAIDS Report, 2008).
Like other organizations in the fight against HIV and AIDS, Bindura University of Science Education (BUSE) has put in place several HIV and AIDS programmes. These include the AIDS action Committee, Voluntary Counselling and Testing Services, Students’ Peer Educators and HIV and AIDS Education as a core course for all undergraduate students. The HIV and AIDS Education course became a core course at Bindura University of Science Education in 2004. It is compulsory for all undergraduate students at BUSE. Since then, one thousand seven hundred and ninety-six (1,796) students have done the course (BUSE registry, 2009).

Seligson and Peterson (1992) state that many students enrolled in universities are between the ages of 18 and 22 years. This age is traditionally a time of sexual experimentation and sexual irresponsibility when they feel relatively immortal and immune to the ravages of disease or accident. Most first year university students are vulnerable, as they will be away from behavioural constraints of home for the first time. In Zimbabwe the predominant mode of HIV transmission is sexual contact, accounting for more than 85% of the HIV infections (MOHCW, 2004). The risk of infection increases with the number of sexual partners a person has and by the actual sexual behaviour with each partner (Jackson, 2002).

It can be argued that a strong knowledge base is a prerequisite to change of attitude and sexual behaviour of people towards HIV and AIDS. If this argument is logical, then the number of HIV infected people should decrease with time. Probably the findings that a decline in HIV and AIDS infection was recorded because of safe sexual practice in Zimbabwe (UNAIDS Report, 2008) support the argument. The argument remains ideal. In practice, as noted by Seligson and Peterson (1992) a person’s level of knowledge about AIDS does not necessarily result in a change of behaviour. Considering that the students at BUSE are young adults, most of them not married and fall in the sexually active group, it may follow that they stand the greatest risk of contracting the HIV virus. With the economic problems in Zimbabwe, there are high chances that some students may engage in risky sexual behaviour in exchange for accommodation and food. Taking this into consideration the study sought to find out if the knowledge students acquire after doing the HIV and AIDS Education course has any impact on their sexual behavior.

The HIV and AIDS course has been on offer at BUSE for over five years. But of concern is the high number of sexually transmitted infections (STIs) recorded at the BUSE Students’ Health Centre. Since 2006, 63 STIs cases were recorded and 14 of these were between May and June 2009. Six students were expelled for cohabiting in 2009. Some female students go out with sugar daddies while others have fallen pregnant indicating that they had unprotected sex. The question is whether the offer of HIV and AIDS as a course was having any positive influence on students’ behavior. “Why do students continue to indulge in risky behaviour after attending the HIV and AIDS course?”

It is hoped that this study will help in evaluating the course programme. Other tertiary institutions may also adopt the findings and recommendations. Further, the Ministry of Health and Child Welfare may also benefit when they are implementing projects which deal with behaviour change of the youth. Some of the recommendations maybe helpful in further development of HIV and AIDS national programmes.
University education in Zimbabwe is important for development of the individual and country. This is why the government invests a lot of money in education. If students are not careful about their sexual behaviour they may end up being infected by HIV. They may fall ill and ultimately die without contributing much to their own development and the country. This does not augur well for sustainable development defined in the Brundtland report cited by Sarre and Smith (1991: 151) as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” Kegley (2009) adds that sustainable development is economic growth that does not deplete the resources needed to maintain life and prosperity. This is why the government urged tertiary institutions to introduce HIV and AIDS as a course. This study is therefore important to evaluate whether the course is having an impact on students’ behaviour, hence contributing to sustainable development in Zimbabwe.

RESEARCH QUESTIONS
The research sought to answer the following questions:

a. How much do students know about HIV and AIDS?
b. Has the HIV and AIDS course contributed to behaviour change among the students?
c. What methods are students at BUSE using to prevent HIV and AIDS infection?

METHODS
Study design and participants
This was a descriptive cross sectional study carried out at BUSE in Mashonaland Central in Zimbabwe. BUSE is a state owned university in Bindura about ninety kilometres north of Harare. The university originated from a government initiative in 1995 to address the shortage of science teachers in the country. At the time the research was carried out, BUSE had three faculties: Faculty of Agriculture and Environmental Science (FAES), Faculty of Commerce and Faculty of Science Education (FSE).

The target population was students who had completed a course in HIV and AIDS in all the three faculties. Students in Part 3 who were on industrial attachment were not considered because they were out of campus. Students in Part one and Part two had not done the course. Therefore only fourth year students totalling 338 were targeted for the study. Faculty of Commerce had 241 students, FAES had 61 students and FSE had 36 students.

A sample of 30 % (101) of the target population was selected. Sampling was carried out at two critical levels, namely, stratified random sampling to ensure that the sample represented all the three faculties. The population was divided into three strata according to faculties. The number of students for each faculty was found by proportional representation. For example, Faculty of Commerce’s 241 students was represented as: 241/338 x 100 = 71.3%. So the sample had 71.3% of 101 for students from the Faculty of Commerce. The sample size from each faculty and total for the study are shown in Table 1.
Table 1: Sample Size

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Population</th>
<th>Percentage</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture and Environmental Sciences</td>
<td>61</td>
<td>18.0</td>
<td>18</td>
</tr>
<tr>
<td>Commerce</td>
<td>241</td>
<td>71.3</td>
<td>72</td>
</tr>
<tr>
<td>Science Education</td>
<td>36</td>
<td>10.7</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>338</td>
<td>100</td>
<td>101</td>
</tr>
</tbody>
</table>

Random sampling was then used to identify 101 students who participated in the research.

**RESEARCH INSTRUMENTS**

The main instrument used to collect data was a questionnaire. The questionnaire consisted of closed and open-ended questions. It consisted of four sections: bio-data, knowledge questions, behavior change questions and how the course may be improved.

Data was also obtained from a focus group discussion. The group was made of five female and five male students selected from the three faculties. The purpose of the discussion was to help clarify points that were raised in the questionnaire.

Data from the questionnaires was presented in themes relating to research questions. Data from the questionnaires was presented on tables and charts.

**RESULTS**

There was a 100% return rate of the questionnaires but eight were incomplete so were not used. The actual sample used was 93 (27.5%) of the targeted population. The majority of the respondents (62%) were male. Most of the respondents (91%) who took part in the study were in the 18-25 years age group. The majority of respondents (86%) were single.

**KNOWLEDGE ON HIV AND AIDS**

Figure 1 shows the respondents’ performance on general knowledge about HIV and AIDS. On average the majority of the respondents (85%) got the answers correct. But some respondents failed to answer questions whether HIV and AIDS were the same or when the HIV virus was first detected in Zimbabwe. Most of the respondents were not sure about how circumcision reduces the risks of HIV infection. Questions on how HIV is transmitted were answered correctly.
The number of the respondents (95%) who passed was high as shown in Figure 2. Nine percent (9%) of the students got all answers correct with 81% rated good. This shows that most of the students were highly knowledgeable about HIV and AIDS.
The results on behavior change indicate that most students (89%) believe the course had a positive influence as shown in Figure 3. For example the majority of them (75%) said they were now afraid of indulging in sex because of what they learned in the course. Similarly most (88%) think that university students changed their sexual behaviour as a result of what they learnt in the HIV and AIDS course. The results were also confirmed by students’ responses to open ended questions on what has changed in their sexual behaviour:

“I am now sticking to one partner and using condoms if necessary”. (A male student)

“I have learnt to be faithful and stick to one partner since multiple partners” will increase the spread of HIV. (A female student)

“I now know how to prevent HIV and AIDS by abstaining from sex or using condoms”. (A female student).

“I learnt that HIV and AIDS can not be detected by merely looking at a person so it is important to get tested. I now know my status and I began a new life”. (A male student).

“I benefited that I should have one partner. (female student)

“I gained a deeper understanding of everything about HIV and AIDS”.(male student)
STUDENTS SEXUAL BEHAVIOUR

Figure 4: Sexual Activity (No. - 93)

On whether the students were sexually active or not, most of them (96%) said they were sexually active (Figure 4).

Figure 5: Number of Sexual partners (No.-93)

On how many sexual partners they had, 60(65%) respondents had more than one sexual partner (Figure 5).
Table 2: Students’ Sexual Behaviour (No. 93)

<table>
<thead>
<tr>
<th>Variables</th>
<th>SA%</th>
<th>A%</th>
<th>NS%</th>
<th>DA</th>
<th>SDA%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being in love with someone means having sexual intercourse</td>
<td>13</td>
<td>36</td>
<td>0</td>
<td>44</td>
<td>7</td>
</tr>
<tr>
<td>Students are at risk of contracting HIV</td>
<td>14</td>
<td>78</td>
<td>0</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Some female students go out with sugar daddies</td>
<td>38</td>
<td>54</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Some male students go out with commercial sex workers</td>
<td>25</td>
<td>60</td>
<td>5</td>
<td>7</td>
<td>3</td>
</tr>
</tbody>
</table>

In data analysis Strongly Agree (SA) and Agree (A) responses were combined as they meant the same. Similarly Disagree (DA) and Strongly Disagree (SDA) responses were also combined. NS stands for not sure.

Table 2 shows that some respondents had risky sexual behaviour. Nearly half of the respondents (49%) agreed that being in love with someone meant having sexual intercourse. The majority of the respondents (92%) believed students were at risk of contracting HIV. Statistics from the BUSE Students Health Centre showed that from March to June 2009, 22 cases of STIs were treated.

Most respondents (92%) believed that most of female students were having affairs with sugar daddies for fun and financial gains. Most of the respondents (85%) agreed that some male students go out with commercial sex workers because they wanted to gain experience, for fun and peer pressure. This was supported by focus group discussions which revealed that most male students had sex with sex workers when they were drunk or when they go to live musical shows. Participants also said they are more likely to have sex without a condom when they are drunk as shown by the following remark.

*It is difficult to think of using condoms when one is drunk.*
Table 3: Students' preventative measures (No. = 93)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Responses</th>
<th>SA</th>
<th></th>
<th>A</th>
<th></th>
<th>NS</th>
<th></th>
<th>DA</th>
<th></th>
<th>SDA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I use preventative measures to protect myself from HIV and AIDS</td>
<td></td>
<td>87</td>
<td>93</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I use condoms to prevent HIV infection</td>
<td></td>
<td>0</td>
<td>0</td>
<td>81</td>
<td>87</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Condoms are easily accessible at campus</td>
<td></td>
<td>5</td>
<td>5</td>
<td>80</td>
<td>87</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Condoms are only used with irregular partners</td>
<td></td>
<td>12</td>
<td>13</td>
<td>54</td>
<td>58</td>
<td>13</td>
<td>14</td>
<td>12</td>
<td>13</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>To abstain from sex is very difficult for me</td>
<td></td>
<td>5</td>
<td>5</td>
<td>46</td>
<td>50</td>
<td>5</td>
<td>5</td>
<td>31</td>
<td>33</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I can abstain from sex until marriage</td>
<td></td>
<td>6</td>
<td>7</td>
<td>31</td>
<td>33</td>
<td>5</td>
<td>5</td>
<td>46</td>
<td>50</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>VCT Centre at the campus helps in changing students’ behavior.</td>
<td></td>
<td>40</td>
<td>43</td>
<td>39</td>
<td>42</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>

Table 3 shows that most respondents (93%) were using preventative measure when they had sex. The majority of the respondents (87%) were using condoms for HIV prevention. The majority of respondents (92%) said that condoms were easily accessible on campus. The responses from focus group discussions confirmed that condoms were found in corridors and bathrooms. But most of them (71%) said condoms were only used with irregular partners.

Abstinence for HIV prevention appears to be difficult for students. Fifty-five per cent (55%) of the respondents indicated that it was very difficult for them to abstain from sex. On the issue of abstaining from sex until marriage, less than half of the respondents (40%) said they could abstain. But in focus group discussion some students believe abstaining is a good method.

“Abstinence is the best way to fight HIV and AIDS because HIV is mostly transmitted through sex”

“As Catholics we do not promote the use of condoms, abstinence is the best”.

The dilemma of abstaining was shown in focus group discussion. Students said they could abstain but if they got someone whom they thought was a faithful partner and wanted to marry them they then changed their stance on abstinence and have sex.
Most of the respondents (85%) agreed that Voluntary Counselling and Testing (VCT) at the campus is helping in changing students’ sexual behaviour. Over 350 students visited the Student Health Centre for VCT since it was introduced on campus in 2007. The importance of VCT was also noted during focus group discussion.

“VCT is helping because if I get tested and find that I am HIV negative I will not engage in sex again, I will wait until I get married.”

“VCT is the best we must know our HIV status in order to plan our future.”

But a few of the respondents were cynical about VCT

“Why should I get tested? It will be same because you can be negative today and get infected the following day”

“VCT at the college I would not go there, the people who carry out the tests know us, so I do not want my status to be known by everyone. Confidentiality is a problem.

HIV AND AIDS COURSE IMPROVEMENT

Most students felt that the way the course was taught must be improved. Some students felt that lectures only were not doing any good to them because they were just learning in order to pass the examinations without practicing what they learnt. Here are some of the responses by students about what should be done to improve the course:

“Find lecturers who are experts in the field and are able to disseminate the information not just to give lectures”.

“If they can bring real life testimonies from people living with HIV and AIDS, may be students will realize the importance of the course”.

“Should go beyond the classroom situation into more real life experiences”.

“I think during the course, professional counsellors should be invited.

Responses from the focus group supported the need for improvement:

“Our class is too big. Teaching HIV and AIDS in smaller groups may improve the course”.

“Students should be taught through the use of videos and dramas to make the course more real”.

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DISCUSSION

The study was carried out to find out the impact of the HIV and AIDS course on students’ behaviour. The study revealed that the course helped students to have high levels of knowledge about HIV and AIDS. This is similar to what was noted by Seligson and Peterson (1992) who said some studies have found that AIDS prevention programmes can be successful on university campuses. Furthermore Blanc (2000) argues that education promotes both logical and different ways of thinking, which allow better educated people to take action in protecting their health. This perhaps explains the logic behind the Zimbabwean government policy to ensure HIV and AIDS education is introduced in the education system from primary to tertiary institutions, an idea also supported by Nziramasanga Commission (1999). The institution under study has gone further than simply introducing the course but has made it a compulsory course which students have to pass in order to graduate. This has provided another motivation for students to know about HIV and AIDS besides the initial motivation of encouraging them to avoid risky behaviours which lead to HIV infection. The knowledge about HIV and AIDS which students are benefitting from the course is important for sustainable development. It is hoped that that when they become workers they will be able to pass on the knowledge to others thereby assist in minimizing the negative effects of HIV and AIDS.

The results revealed that students believe that HIV and AIDS Education course had a positive impact on their behavior. This concurs with Kerry (2000) who said education has a critical role to play in mitigating the effects of HIV and AIDS by providing knowledge that will inform self-protection, values and behavior that will lower infection risks. But unfortunately this has not been complemented by actual behaviour. This is because most of the students said they were sexually active, had more than one sexual partner and some were going out with HIV risk groups such as sugar daddies or commercial sex workers. Positive behavior change has to battle with other factors such as financial needs, having fun and peer pressure. This is similar to findings by Katsinde and Katsinde (2007) who found out that pupils in secondary schools engaged in sexual relations in order avoid negative labels by their friends. This means that students’ sexual behavior is not an individual affair but involves other people. The inability by some students to change their risky behaviour in relation to HIV and AIDS has a negative effect on sustainable development. Some of the students may be infected and end up dying early because of AIDS so may not be able to use their acquired skills in developing the country. Hence fail to bring about sustainable development.

The study has shown that students are to a large extent using condoms for HIV and AIDS prevention. This is similar to what was said by Irin (2009) that condoms are an effective preventative measure for combating of HIV and AIDS. But the use of condoms may not be consistent as it has emerged that students mainly use condoms with irregular partners. This confirms what was pointed out by Halperin and Epstein (2006) who said while condoms remain important interventions, there is considerable evidence that people worldwide are more likely to use condoms during commercial and casual sexual encounters than in longer-term relationships. The inconsistency in the use of condoms was also confirmed in this study by some students getting pregnant while some contract sexually transmitted infections. This therefore means some students still engage in risky behavior. On why students behave like this may be explained by the trust they have with their partners. The trust is misplaced. Giddens (2001) has warned that there is a relationship between risk and trust. He argues that in a world of
globalization it is dangerous to trust as people did in village communities they used to live in. Giddens therefore advises people to be cautious by his theory of social reflexivity. ‘Social reflexivity refers to the fact that we have to constantly think about or reflect upon, the circumstances in which we live our lives.’(Giddens, 2001: 680). Trusting sexual partners is a factor in HIV transmission. The more people trust the more chances that HIV is transmitted. The students’ trust of their partners may lead them to HIV infection. This has a negative effect on sustainable development.

The study has also revealed that slightly over half of the students use abstinence as a preventive measure. But some of these would stop abstaining if partners promise marriage. This is further compounded by the fact that some students found it difficult to abstain or avoid sex before marriage. Once students promise each other marriage trust begins, and they end up indulging in unprotected sex. This is not safe. The only way to be safe might be to ensure that they undergo Voluntary Counselling and Testing (VCT). This study has revealed that most students believe VCT is helping in changing students’ behaviour and many appear to be in favour of VCT. The response according to the health centre at BUSE has been ‘overwhelming.’ This is a positive impact but a complaint by a few students has been the fear of people knowing their HIV status. The majority of students view VCT positively and may be practicing it. Abstinence and VCT if practiced properly have positive impact on sustainable development.

According to the students the teaching methods for HIV and AIDS should be improved by using a variety of methods. This is an indication that the course is important for them. The fact that the course is examination oriented might be compromising the original aim of the course of helping in changing behavior. This confirms what was said by Garfield and Hammond quoted by Seligson and Peterson (1992) that students were bored with speeches filled with statistics when HIV and AIDS is taught. The students at BUSE complained that classes were too big; lectures lacked practical examples and failed to use other HIV and AIDS experts. The teaching and learning of HIV and AIDS should be innovative so that it leads to behaviour change and hence have positive impact on sustainable development.

CONCLUSION
The HIV and AIDS course had a positive impact on students’ sexual behavior but students have to battle with other intervening factors and influences. Sometimes these factors and influences lead students to take risky sexual behaviours. Of particular concern is the danger of trusting partners whose status they do not know. The trust usually leads students to be involved in risky sexual behaviours for personal and immediate gratification without thinking much of the negative consequences of their actions. The students’ risky behaviour does not augur well for sustainable development in Zimbabwe and Southern Africa in general, which are battling to control the spread of HIV and AIDS. If students continue to take risky behaviour investment being made by parents and the state will go to waste, hence fail to sustain development. The HIV and AIDS course is important for university students in order to enhance development which is able to sustain itself. If not taken seriously investment through education will achieve very little as most students may die before using their skills to develop Zimbabwe for themselves and future generations.
The university is urged to ensure that the teaching and learning of HIV and AIDS Education is characterized by a variety of methods and not just the lecture method.

REFERENCES

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