

## **HIV/AIDS Educational Strategies in Private Primary Schools: A Pilot Study in Gaborone City, Botswana**

<sup>1</sup>P.J. Squire and <sup>2</sup>Friday Makowe

<sup>1</sup>Department of Agricultural Economics, Education and Economics, Botswana College of Agriculture,  
Private Bag 0027, Gaborone, Botswana, Nigeria

<sup>2</sup>Agriculture Science Teacher, Botswana Teaching Service Management, Botswana, Nigeria

**Abstract:** The study was a descriptive survey conducted in 14 private primary schools in Gaborone city in Botswana. A structured and self-administered instrument was used to collect data from 12 head masters out of the 14 head masters identified to participate in the study. Descriptive statistics was used to report the findings. The results showed that the private primary schools in Gaborone use a variety of HIV/AIDS prevention educational strategies to make primary school pupils aware of the HIV/AIDS pandemic in the country. The study further identified cultural and other barriers to the implementation of private primary school-based HIV/AIDS educational strategies. The majority of the respondents was women, 41-50 years of age, non Botswana citizens, married, had bachelor's degrees, had 16-20 years teaching experience and held the position of headmaster.

**Key words:** HIV/AIDS, educational strategies, private primary schools, pilot study

### **INTRODUCTION**

Private schools are schools not administered by the state or national governments. The schools retain the right to select their pupils for admission and are funded in whole or in part by charging tuition and other fees to manage the schools rather than with public or state funds (Collins, 2001). Private schools range from pre-schools to tertiary level institutions in Botswana (Ministry of Finance and Development (Planning, 2003).

HIV/AIDS education is an important component of the curriculum of all educational institutions in Botswana as the HIV/AIDS epidemic is currently a disease that is having devastating effects on national and socio-economic development. According to USAID (2002) and the Botswana National Strategic Frame work for HIV/AIDS (2003-2009), Botswana is one of the countries that has been hardest hit by the world wide HIV epidemic. In 2004, Botswana had a population of 1.7 million, has an estimated 350,000 people living with HIV and a HIV prevalence rate of 36.5%. Life expectancy is only 39 years, while life expectancy would have been 72, if it were not for the AIDS epidemic. There are around 60,000 registered orphans in the country but it is feared that Botswana will have about 200,000 orphans in 2010 if the current

HIV/AIDS infection is not reversed. In an address to the UN general assembly in 2001, the president of Botswana, Festus Mogae, said we are threatened with extinction. People are dying in chillingly high numbers. It is a crisis of the first magnitude.

Although, there are a number of HIV/AIDS prevention programs in Botswana, there are a lot of problems that affect pupils in primary schools. These problems include transmission of Sexually Transmitted Diseases (STDs), rape cases involving pupils, growing number of children either infected or affected by HIV/AIDS, decline in school enrolment due to drop-outs and increasing illness among children (Botswana National Strategic Frame Work for HIV/AIDS, 2003-2009). There is little or specific strategies that have been or are currently being used by private primary schools to create awareness of HIV/AIDS among pupils in Botswana. This study focused on identifying those strategies that private primary schools implement in order to create awareness of HIV/AIDS pandemic among school children in Gaborone, the capital city of Botswana. However, the study has some limitations as a result of the small number of the primary schools surveyed. The concepts and principles used in the study could assist other researchers to replicate the study on a wider scope, possibly to cover the whole country.

**Conceptual framework:** According to Chelu (1998) and (<http://aids.about.com/od/technicalquestions/f/whathiv.htm>), AIDS stands for Acquired Immune Deficiency Syndrome. The disease is caused by a virus called Human Immunodeficiency Virus (HIV). HIV weakens the immune system, ultimately causing AIDS. AIDS is a cluster of medical conditions often referred to as opportunistic infections and cancers to which no cure has been found. HIV is mainly transmitted sexually through exchange of vaginal fluids and semen between infected persons and uninfected persons. Exchange of vaginal and semen is the commonest way, by which people get infected with HIV in Botswana. Other possible ways identified by (Badisang, 1995), by which HIV infection could spread include: Accidental injections of infected blood from infected syringes and needles, traditional medicine where small cuts are made in the skin, ear piercing and tattooing, sharing of tooth brushes, drug addicts who inject drugs into themselves with dirty needles and syringes and through breast milk. The HIV virus and the CD4 lymphocytes, both of the human body replicate. As the number of virions drop, the immune system becomes weaker and weaker. When the immune system deteriorates the infected individual becomes vulnerable to opportunistic infections and if not treated the average person dies in 1-3 years (Ncube, 2006).

Botswana's response to the AIDS epidemic can be divided into three stages. The early stage (1987-89) focused mainly on the screening of the blood to eliminate the risk of HIV transmission through blood transfusion. The second stage (1989-97) and the first Medium Term Plan (MTP), saw the introduction of information, education and communication programs, but the response was still fairly narrowly focused. During this stage, in 1993, the government adopted the Botswana National Policy on AIDS. During the third stage (1997-2007) the response to HIV/AIDS pandemic was expanded in many directions to include education, prevention and comprehensive care including the provision of antiretroviral treatment, which was aimed at reducing the impact of HIV and AIDS at all levels of society (<http://www.avert.org>).

The impact of HIV/AIDS in Botswana is felt in all sectors of the country. There is premature death of skilled workers, absenteeism, illness, decline in productivity, drop in school enrollment, decrease in the number of teachers and increase in the number of orphans. The National AIDS Co-ordination Agency (NACA) was set up in 2000 and was given responsibility to mobilize and coordinate a multi sectional national response to HIV and AIDS (<http://www.avert.org>).

There are many different HIV/AIDS initiatives and programs that have been put in Botswana. One of the most high profile initiatives is the African Comprehensive HIV/AIDS Partnerships (ACHAP). ACHAP is a partnership between the government of Botswana, the Bill and Melinda Gates Foundation to fight the HIV/AIDS scourge in the country. ACHAP was established in July 2000, with the aim of supporting the goals of the Botswana government in decreasing HIV incidence and significantly increasing the rate of diagnosis and treatment of the disease by rapidly advancing prevention programs, health care access, patient management and the treatment of HIV/AIDS (<http://www.avert.org>). With help from these and other partners-including the Global Fund, the Harvard School of Public Health, the Bristol-Myers Squibb Foundation and numerous faith-based and community-based organizations-Botswana is mounting one of Africa's most comprehensive programs of HIV/AIDS prevention, treatment and care (<http://www.avert.org/aidsbotswana.htm>).

According to, the HIV/AIDS prevention programs currently taking place in Botswana public schools include: public education and awareness-for example Botswana has sex billboards and HIV and AIDS posters everywhere; Education for young people-for example sensitizing pupils through the Ministry of Education HIV and AIDS Talk Back Program on Botswana Television; condom distribution and education- for example the launch of both male and female condoms and making condoms a commonly available product in the country; Prevention of Mother to Child Transmission (PMTCT)-that is, more women are enrolled in PMTCT programs in order to prevent mother to child transmission and Voluntary testing and counseling-many Voluntary HIV Counseling and Testing centers (VCT) have been opened in the country for people to know their HIV and AIDS status.

Botswana National Strategic Framework for HIV/AIDS (2002-2009) indicated that over 35% of people aged 15-49 in Botswana are HIV positive and yet most of them do not know they are positive. Stigma and denial create an environment maintaining the potential for increased infection as well as limiting the ability of people to live positively and responsibly with HIV/AIDS. The socially reinforced subordination of women, which underlines many aspects of their vulnerability, especially their lack of economic empowerment is a major contributor for their exposure to the HIV/AIDS disease. The social acceptance of sexual networking by men is also fundamental and further under-scores the subordination of women in Botswana. Initiatives are on-going to strengthen the legal and ethical environment to support

empowerment of women and youth. The access to and abuse of alcohol, particularly among the youth has been shown to increase the incidence of casual and unprotected sex, thus having a significant influence on the spread of HIV/AIDS in the country.

Chelu (1998) and (<http://aids.about.com/od/technical/questions/f/whathiv.htm>) stated that HIV/AIDS is fast becoming a disease of the poor. Young girls from poor families risk contracting HIV/AIDS when rich older men entice them with money and material things to have sex with them. Limited access to housing and health care also leads poor unemployed and frustrated youth to turn to drugs and also alcohol as an escape from social problems. When youths take drugs and when they exchange needs, they will transmit HIV/AIDS virus from infected persons to uninfected ones. Also, when people are drunk they are likely to have sex with any person and risk being infected with HIV/AIDS.

According to the National HIV/AIDS Strategic Frame Work, currently there are an estimated 78,000 orphans in Botswana primarily due to HIV/AIDS related deaths of their parents. Most orphans live in poverty stricken house-holds and are subjected to child labour and sexual abuse. They are more likely to drop out-of-school, fall pregnant and be exposed to HIV/AIDS infection.

Badisang (1995) stated that in the last 20 years rapid economic growth in Botswana has been coupled with an equally rapid movement of people from rural to urban areas. In spite of the high level of urbanization in Botswana, most of those living in towns still have strong rural roots to which they frequently return. The traditional system of livelihood depends on cattle and agriculture, which also promote the movement of rural people. Also, constant movement of family members between cattle posts, fields and the towns, often leave children of school-going age unattended for an extended period of time so that they can continue with their education. Such environment lacks supervision for young children and possibly increasing their risks of being abused and contracting HIV/AIDS.

The Botswana National policy on HIV/AIDS (1998) stated that high levels of morbidity and mortality among teachers threaten to reduce the number of classroom hours being taught, the quality of teaching and the learning environment, as well as the delivery capabilities of the system. With the growing number of children either infected or affected by HIV/AIDS, school enrolments are expected to decline due to dropouts, increased illness, or children having to care for family members. Those who remain in the classroom, seeing their friends and teachers being infected or affected by the HIV/AIDS epidemic, are traumatized and suffer from a decreased ability to learn.

Unemployment rate also is rising in Botswana and it has affected the youth country wide. This problem is likely to increase the level of poverty in the country and hence increasing the vulnerability of HIV/AIDS infections as young girls may start sexual affairs with well off men in exchange for money and material goods (Oitsile, 2002).

## **MATERIALS AND METHODS**

**Study design:** The study was a descriptive survey that obtained information about the strategies private primary schools take to create awareness of HIV/AIDS pandemic among school children. A structured self-administered questionnaire was used to collect data from the headmasters of the participating primary schools in Gaborone.

**Purpose and objectives of the study:** The purpose of the study was to determine the strategies taken by school authorities to create awareness of HIV and AIDS among pupils in private primary schools in Gaborone. The specific objectives were to: Determine strategies taken by private primary schools in order to create awareness of HIV and AIDS among pupils; identify the barriers to the implementation of HIV/AIDS prevention strategies in private primary schools and describe the demographic characteristics of the respondents.

**Study population:** The study population comprised primary school head teachers in 14 private primary schools in Gaborone.

**Instrumentation:** The researchers developed a structured and a close-ended instrument for collecting the study data. The instrument developed was based on the literature reviewed. The instrument was divided into three parts. Part one consisted of questions that were meant to obtain information about the strategies that head teachers had taken to create awareness of HIV/AIDS among pupils in their schools. A 5 point Likert-type scale with the following levels:

- Never Used (NU)
- Used Seldomly (US)
- Undecided (U)
- Frequently Used (FU)
- Very Frequently Used (VFU) to develop the questions in this study

The 2nd part solicited information from the head masters about the factors affecting the implementation

**Table 1: Educational programs private schools use to create awareness of HIV/AIDS among private primary school pupils (N = 12)**

Response items	Mean	SD
Moral education lessons	4.75	0.45
Encouraging pupils to abstain from sex	4.50	0.79
Integrating HIV/AIDS educational programs into school lessons	4.42	1.16
Making children aware of the risks of having multiple sex partners	4.33	0.78
Having HIV/AIDS as a subject of study in the school	4.17	1.27
Guidance and counseling lessons	4.00	1.28
Promoting family life education	4.00	1.13
Promoting recreational facilities to the pupils	3.92	1.24
Peer exchange of HIV/AIDS information	3.25	1.54
Placing HIV/AIDS information on billboards	3.08	1.73
Use of internet as source of HIV/AIDS information	2.83	1.53
HIV/AIDS workshops	2.58	1.38
Ministry of Education HIV/AIDS Awareness and prevention programs	2.50	1.17
Inviting stakeholders such as nurses, social workers, to address pupils	2.50	1.31
School HIV/AIDS club interactions	2.25	1.71
School HIV/AIDS Awareness meetings	2.17	1.53
National AIDS coordinating Agency educational programs	1.75	1.06
Promoting the use of male and female condoms	1.75	1.14
Inviting HIV/AIDS activists to address pupils	1.58	0.79
Field trips to hospitals	1.50	0.90
Parents-teacher Association	1.50	0.90

Likert type scale: Never Used (NU); Used Seldomly (US); Undecided (U); Frequently Used (FU); Very Frequently Used (VFU)

**Table 2: Barriers to the implementation of private primary school-based HIV/AIDS educational strategies (N = 12)**

Characteristics	Mean	SD
The level of importance given to HIV/AIDS topic in school	4.33	1.15
Time allocated for HIV/AIDS lessons in schools	4.00	1.05
The amount of HIV and AIDS information given to teachers	4.00	0.60
The number of HIV/AIDS pamphlets and posters on the notice board	3.33	1.15
Teachers attitude towards HIV/AIDS affected or infected Pupils	3.33	1.23
PTA'S attitude towards promoting school HIV/AIDS education	3.08	1.24
School administration policy	3.08	1.50
Religious beliefs	2.83	1.40
Age difference between pupils	2.75	1.22
The amount of HIV/AIDS Talk-back programs on Botswana Television	2.58	1.31
The number of active HIV/AIDS clubs in the school	2.25	1.14
Number of HIV/AIDS workshops teachers attend	2.25	1.22
Teacher's limited knowledge of HIV/AIDS	2.17	1.53
Hear say information about HIV/AIDS	2.08	1.08
Cultural taboos	1.83	0.94
Ignorance of HIV/AIDS issues	1.83	1.34
Discrimination	1.83	1.27
Stigmatization	1.58	1.08

Likert-type scale: No Barrier; some barrier; undecided; great barrier; very great barrier

of HIV/AIDS educational strategies in private primary schools. A five point Likert-type scale with the following levels:

- No barrier
- Some barrier
- Undecided
- Great barrier
- Very great barrier to develop the questions was used to develop the questions in this study

The third part consisted of questions related to the demographic characteristics of the respondents. The validity of the instrument was established by 3 lecturers in the department of agricultural economics, education and extension at the Botswana College of Agriculture.

The suggestions of the three lecturers were incorporated into the instrument for data collection. The reliability of the instrument was established by pilot testing it with 5 head teachers in government primary schools in Gaborone. Analysis of data obtained from the pilot test yielded a reliability coefficient of 0.85, indicating that the instrument was adequate for collecting data from the study population.

**Data collection:** The researchers collected the data by the use of a self administered instrument. The researchers delivered the instrument together with a covering letter explaining the purpose and objectives of the study to the headmasters in all the 14 private primary schools in Gaborone. The researchers collected 12 completed instruments from the respondents after a period of 1 week.

Table 3: Demographic characteristics of the respondents (N = 12)

Characteristics	Frequency	(%)
<b>Gender</b>		
Male	4	33
Female	8	67
<b>Age</b>		
31-40	1	8
41-50	11	92
<b>Nationality</b>		
Motswana	1	8
Expatriate	11	92
<b>Marital status</b>		
Single	1	8
Married	11	92
<b>Level of education</b>		
Bachelor's degree	10	83
Master's degree	2	17
<b>Teaching experience</b>		
6-10 years	1	8
11-15 years	1	8
16-20 years	6	50
21 and above	4	33
<b>Position held</b>		
Senior teacher	1	8
Deputy head teacher	2	17
Head teacher	9	75

However, in spite of many follow-up phone calls, letters and personal visits, 2 private primary school headmasters did not complete the instrument due to religious and other unexplained reasons. The completed instruments were carefully cross checked for non-responses in order to avoid non-response error.

**Data analysis:** Data were coded and analyzed by the use of the SPSSpc + computer program. Descriptive and statistics were used to report the findings of the study. In Table 1 and 2, a median would separate agreement from disagreement, on a 5 point Likert-Type scale. In Table 3, frequencies and percentages were used to interpret the data.

## RESULTS

**Educational programs private schools use to create awareness of HIV/AIDS among private primary school pupils (N = 12):** Table 1 shows the strategies the respondents use to create awareness of HIV/AIDS among pupils in their schools. According to the table, the respondents agreed that the strategies that are very frequently used are moral education lessons (Mean 4.75), encouraging pupils to abstain (Mean 4.50), integrating HIV/AIDS into school lessons (Mean 4.42), making children aware of the risks of having multiple sex partners (Mean 4.33), Having HIV/AIDS as a subject of study in the school (Mean 4.17), Guidance and Counseling Lessons (Mean 4.00), promoting family life education (Mean 4.00), promoting recreational facilities to the pupils (Mean 3.92), peer exchange of HIV/AIDS information (Mean 3.25) and placing HIV/AIDS information on bill boards (Mean 3.08). However, the respondents disagreed

about using all the strategies with mean values ranging from 2.83-1.50 as strategies they use to create awareness of HIV/AIDS in schools.

**Barriers to the implementation of private primary school-based HIV/AIDS educational programs:** Table 2 shows the respondents views about barriers to the implementation of private primary school-based HIV/AIDS educational strategies. According to the table, the respondents agreed that the level of importance given to HIV/AIDS in the school (Mean 4.33), time allocated for HIV/AIDS lessons in schools (Mean 4.00), the amount of HIV/AIDS information given to teachers (Mean 4.00), the number of HIV and AIDS pamphlets and posters on the notice board (Mean 3.33), teachers attitude towards HIV/AIDS affected or infected pupils (Mean 3.33), PTA'S attitude towards promoting school HIV/AIDS education (Mean 3.08) and school administration policy (Mean 3.08) were the barriers identified by the respondents to the HIV/AIDS implementation of educational programs in schools. However, the respondents agreed that all other response statements with mean values ranging from 2.83-1.58 did not affect the implementation of the schools HIV/AIDS educational programs.

**Demographic characteristics of the respondents:** According to the data in Table 3, 67% of the respondents were female, 92% aged between 41-50 years, 92% expatriates, 92% married, 83% had a bachelor's degree, 50% had 16-20 years of teaching experience and 75% held position of head teacher.

## DISCUSSION

The results of the study have shown that the private primary schools in Gaborone city have strategies in place to make the pupils aware of the HIV/AIDS pandemic in the country. The efforts of the private primary schools' based HIV/AIDS strategies are in conformity with the National HIV/AIDS education strategies, which among many others include teacher-capacity building program that has been developed jointly by the Ministry of Education of Botswana and the United Nations Development Program (UNDP), in collaboration with the Government of Brazil and with support from ACHAP. The program is trying to improve the teachers knowledge, to demystify and destigmatizes HIV/AIDS and to break down cultural beliefs about sex and sexuality. As part of the project, all primary and secondary schools have been equipped with a television, video recorder, satellite dish and decoder and an interactive AIDS education program called Talk Back is broadcast twice weekly by Botswana Television (<http://www.avert.org/aidsbotswana.htm>). Cultural and attitudinal barriers however affect the implementation of school-based HIV/AIDS educational strategies.

## CONCLUSION

The findings of the study suggest that private primary schools are implementing policy similar to those to government's policy in providing school based HIV/AIDS educational programs. However, cultural barriers such as sexual matters should not be discussed with children, the limited information teachers have about HIV/AIDS prevention strategies, the limited importance and time given to HIV/AIDS prevention education programs have had a negative effect on the private primary schools in promoting HIV/AIDS educational programs in the schools.

## RECOMMENDATIONS

Based on the findings of the study and the literature reviewed, it was recommended that:

- HIV/AIDS prevention education programs should be given great prominence in the school curriculum. Where the school teachers or headmasters are found to be deficient in disseminating HIV/AIDS education information to the primary school children, HIV and AIDS health workers should be invited as resource persons to teach the children how to prevent themselves from the HIV/AIDS infection
- Both parents and primary teachers should be given the opportunity to attend workshops that will focus on changing their attitudes toward school-based HIV/AIDS educational programs, their attitudes toward HIV/AIDS affected and infected pupils
- The Ministry of Education should formulate HIV/AIDS education policies that should be implemented in both Government and private schools through out the country
- More time should be allocated in the school time table to HIV/AIDS educational programs

- The study should be conducted to include all primary schools in the country. The outcome of such study will enhance the formulation of primary school-based HIV/AIDS prevention educational policy by the Ministry of Education

**Educational importance:** The findings of this study have far reaching educational implications for creating awareness of HIV/AIDS among pupils in both private and public primary schools in Botswana.

## REFERENCES

- Badisang, E., 1995. Living with AIDS in the community. 3rd Edn. Macmillan Botswana Company, Ptv Ltd Gaborone, Botswana.
- Botswana National Policy on HIV/AIDS, 1998. Approved and Adopted by Government through Presidential Directive CAB: 33198. Gaborone. Ministry of health.
- Chelu, K., 1998. AIDS information for secondary schools. Health Education Unit Lusaka, Zambia.
- Collins, H., 2001. Collins co-build English Dictionary for Advanced Learners. 3rd Edn. Harper, UK. Directorate of Public Service Management. The public service code of conduct on HIV/AIDS in the workplace. Government Printer, Gaborone.
- Ministry of Finance and Development Planning, 2003/2009. National Development Plan 9. Government Printers, Gaborone.
- Ncube, E., 2006. HIV/AIDS Education, Prevention and Control lecture notes. Botswana College of Agriculture, Gaborone.
- Oitsile, B.K., 2002. The Prevention and Future challenges for HIV/AIDS organizations in Botswana. Gaborone, Botswana.
- USAID, 2002. Life expectancy will drop world wide due to AIDS. <http://www.usaid.gov/press/release/2002/pro20708.htm>.