THE IMPACT OF HIV/AIDS ON PRIMARY AND SECONDARY EDUCATION IN BOTSWANA:

DEVELOPING A COMPREHENSIVE STRATEGIC RESPONSE

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ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ARTS	Anti-retroviral drugs
ASR	Annual statistical return
BIDPA	Botswana Institute of Development Policy and Analysis
BOMAID	Botswana Medical Aid Society
BPOMAS	Botswana Public Officers' Medical Aid Society
CD&E	Department of Curriculum Development and Evaluation
CJSS	Community Junior Secondary School
CSO	Central Statistical Office
DFID	Department for International Development
DMSAC	District Multi-Sectoral AIDS Committee
DPSM	Department of Public Services Management
FEW	Family Welfare Educator
FLE	Family Life Education
GoB	Government of Botswana
G&C	Guidance and Counselling
HIV	Human Immunodeficiency Virus
IEC	Information, education and communication
IDM	Institute of Development Management
MoE	Ministry of Education
MoH	Ministry of Health
MoLG	Ministry of Local Government
NAC	National AIDS Council
NACA	National AIDS Coordination Agency
NDP	National development plan
NER	Net enrolment ratio
NGO	Non governmental organisation
PACT	Peer Approach Counselling for Teenagers
PSMDP	Primary School Management Development Project
PSI	Population Services International
RNPE	Revised National Policy on Education
SMT	School management team
SRH	Sexual and reproductive health
STD	Sexually transmitted disease
STPA	Short Term Action Plan for Orphans
TT&D	Department of Teacher Training and Development
UB	University of Botswana
UNDP	United Nations Development Programme
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations Children's Fund
WHO	World Health Organisation
YWCA	Young Women's Christian Association

EXECUTIVE SUMMARY

This report presents the findings of an impact assessment of HIV/AIDS on primary and secondary schooling in Botswana. On the basis of this assessment, the report then outlines a comprehensive strategy that will effectively mitigate the likely impacts of this scourge on the education sector.

The report is structured around the following three areas of impact:

- the impact of school-based HIV/AIDS education in preventing the further spread of the virus among children and youth
- the actual and likely future impact of HIV/AIDS on children, particularly among those who are most directly affected, namely, orphans, carers, and children who are HIV positive;
- the actual and likely impact of HIV/AIDS on teachers and other staff employed by the Ministry of Education.

A six-person team undertook this study between March and October 2000. Three types of data were collected: quantitative and qualitative information from a representative sample of primary and secondary schools in two districts (Kweneng East and North East); confidential interviews with senior managers and other professional staff in the MoE, other relevant ministries and civil society organisations, and secondary data from a variety of sources.

HIV/AIDS Education

There is a serious paucity of good-quality information about the sexual behaviour of adolescents in Botswana. It is difficult, therefore, to reach any firm conclusions about the extent to which young people have changed their sexual behaviour since the start of the HIV/AIDS epidemic. What little evidence is available is somewhat mixed. On the positive side, national health statistics show large falls in teenage pregnancy and sexually transmitted diseases (STDs) since the mid 1990s and the HIV prevalence rate among pregnant girls aged 15-19 fell from 28.6 percent in 1998 to 21.5 percent in 1999. However, the findings of the school survey provide no strong indication that schoolchildren are less likely to put themselves at risk from contracting HIV. Love relationships are reported to be very common in secondary schools.

There is broad agreement among school management teams, teachers, and students as well as among well-informed outsiders that the current approach of 'infusion and integration' of HIV/AIDS topics into the curriculum is not producing the desired changes in sexual behaviour. There are also serious problems with school-based guidance and counselling services, particularly in primary schools.

Teachers are a relatively unimportant source of information on sexual reproductive health issues for primary school students. Teachers do, though, play a significant information dissemination role in secondary schools, for both boys and girls. While major gaps in knowledge about HIV/AIDS among adolescent children exist at the primary school level, secondary school students are

relatively knowledgeable about the causes and consequences of the disease. However, this does not appear to translate into lower risk sexual behaviour.

The following recommendations are proposed in order to increase the efficacy of HIV/AIDS education in schools:

- A comprehensive nationwide survey on the sexual behaviour of adolescents (10-19) should be immediately commissioned.

- The current integration and infusion approach should be strengthened. In particular, HIV/AIDS and family life education should start in Standard 1, pre- and in-service training in this area should be intensified, and additional topics on specific aspects of HIV/AIDS should be included.

- A parallel SRH curriculum should be introduced as soon as possible, which focuses on the development of attitudes and other essential psychosocial skills that will enable young people to lead healthy lives. At least one, and preferably two, separate lessons should be time tabled each week in order to teach this new SRH/life skills curriculum, which must be genuinely learner-centred and utilise a wide range of audio-visual and other media. As with any other subject, there should be specialist teachers, who have both the professional commitment and expertise to meet well-defined learning objectives. The new cadre of SRH teachers should be recruited from among serving teachers and given intensive training over a 6-8 week period. Around 950 of these teachers will need to be deployed across all schools in the country.

- Peer education needs to be rapidly strengthened in all schools and students should be actively encouraged to form anti-AIDS clubs.

- Steps should be taken to strengthen the School Health Programme. Serious consideration should be given to the Ministry of Health providing medical services directly to schools. This would include adolescent-friendly reproductive health clinics.

- Condoms should be made available to all secondary school children as well as older children in Standards 6 and 7 who are known to be sexually active and have been professionally counseled.

- Urgent action is needed to increase parental involvement in SRH education.

- Improving the livelihoods of the poor is critically important in stemming the AIDS epidemic.

- Every effort must be made to protect schoolchildren from rape and other unacceptable sexual relationships with adults.

STUDENT MITIGATION

Children living with AIDS: Around 0.8 percent of the primary school intake is likely to be infected with HIV. This should however fall to 0.4 percent by 2010 if the Mother-to- Child Transmission Programme is successfully implemented.

Children looking after the sick: When children have to look after sick parents and other relatives, their education may suffer. While very few students are currently being adversely affected in this way, without appropriate interventions to reduce the burden of care, this could become a major problem during next decade.

Orphans: Around 10 percent of schoolchildren in Botswana are maternal and double orphans. This figure is projected to increase to 35-40 percent by 2010.

Between one-third to a half of these orphans suffer from material and/or emotional deprivation of one sort or another, which adversely impacts on their education. It is the orphans from the poorest households who generally have the most problems with their education. While, therefore, there are problems that relate specifically to orphan hood, it is the existence of endemic poverty that is largely responsible for many of the difficulties faced by orphans.

School attendance and educational attainment among orphans is surprisingly good. Only 7-10 percent of registered orphans are out of school, and perhaps half of these have completed primary education. Absenteeism from school is very low among double orphans, both in absolute and relative terms. This is mainly because household demand for child labour appears to be relatively low and/or can be met out of school hours and orphans have strong material and emotional/psychological incentives to attend school. The provision of school meals is a major incentive to attend school among the most disadvantaged orphans.

There is little overt discrimination by teachers and students against any of these three groups of children most affected by HIV/AIDS. However, schools have not systematically addressed the specific needs of these children. To a large extent, this is because teaching staff believes that social workers employed by the Department of Social and Community Development have primary responsibility for assisting them. Identification of orphans by teaching staff is generally very poor, and targeted support patchy and ad hoc.

The study makes two sets of recommendations concerning what should be done to support children most affected by HIV/AIDS. Firstly, what should communities and the government as a whole do? The key point to emphasise here is that the impact of the epidemic on the education sector will to a very large extent depend on the overall level and effectiveness of assistance that is provided to affected children and their carers outside of school. It is essential, therefore, that these children and their families are properly supported. A number of measures are suggested including Multi-Sectoral Child Welfare Committees at the village and district levels, proper provision of nutritional and other basic needs, fostering and residential care, and child protection legislation.

Secondly, the MoE must itself develop its own policy and practice in order to create a supportive school environment for these children. The study makes the following recommendations.

- Full-time Guidance and Counselling Teachers in each school should take the lead in the formulation and implementation of school action plans with respect to these children.

- The MoE should play an active advocacy role throughout government and civil society in ensuring that the material and emotional needs of these children are met.

- Intensive pre- and in-service training programmes are needed in order to improve the overall quality of school environment and promote the required changes in teacher attitudes and behaviour.

- Time, resources, and incentives must be created to enable teaching staff to support affected children properly.

- Systematic needs assessment and monitoring should be undertaken at every school.

- All referrals to SC&D should be followed-up promptly and, where necessary, appropriate action taken.

- Primary and secondary schooling should be both free and compulsory.

- Schools should have special feeding programmes for orphans who are in especially difficult circumstances and other needy children. Part of the SC&D orphan food ration could be diverted to schools for this purpose.

- Where appropriate, the most seriously affected children should become boarders at schools that already have well-established boarding facilities.

- The provision of school-based medical services should be expanded.

- Guardians and other carers should be more actively involved.

- Schools should participate fully in community-based programmes that support orphans.

- Post-school vocational training and non-formal education programmes should target orphans and other seriously affected children.

TEACHER PREVENTION AND MITIGATION

The MoE has a total establishment of permanent and pensionable posts of 20,246, which accounts for 43.2 percent of central government employment. Almost 20,000 teaching staff were in-post in mid 2000 (82 percent permanent, 6 percent foreign contract, and 12 percent temporary, untrained). Two-thirds of teachers are women and 70 percent are single.

HIV prevalence, mortality and morbidity: It is commonly argued that teachers in SSA countries have relatively high HIV prevalence rates, because they are relatively well off (particularly in rural

areas), and are mobile and often live away from their home areas. Unfortunately, information on actual HIV prevalence among teaching staff or equivalent occupational groups has not been collected in Botswana. However, data from a variety of sources indicate that mortality rates among teaching and other MoE staff are currently at least one-half the overall adult mortality rate. Within the teaching profession, mortality rates among males are roughly double those for females and three-four times higher among primary than secondary school teachers. Mortality rates among male primary school teachers who are married, male primary school teachers at schools in the North Education region, and male primary school head teachers are exceptionally high. Teacher mortality currently accounts for one-third of all attrition.

There is no time series data, but currently teacher absenteeism is not generally perceived to be a serious problem at most schools. At least one teacher was reported to be 'persistently' ill at each of the survey schools.

Low teacher morale and motivation appears to be a sizeable problem in many schools, but the overall incidence of morbidity and mortality is currently too low to have much direct impact on teacher performance.

AIDS in the workplace (AIWP): Apart from a limited amount of HIV/AIDS education and information and some condom distribution, there are no other specific AIWP interventions in schools in Botswana.

The report discusses the following areas of concern: HIV/AIDS education, anti-discrimination, testing for HIV, deployment and transfers, teaching cover, sickness, retirement and other benefits, medical support and anti-retroviral drug therapies, and sexual misconduct.

The study recommends that a comprehensive AIWP strategy for all MoE staff is designed and implemented as soon as possible. This should cover the full range of well-established 'best practices' that have been adopted by progressive employers, in particular in high prevalence countries. A key issue is that the school environment is not particularly teacher-friendly. Only one-quarter of secondary teachers and under a half of primary school teachers feel that they can discuss their personnel problems with school management. Making schools more teacher-friendly is, therefore, critically important in order that comprehensive AIWP programming can be successfully implemented in the education sector.

The most critical recommendations are as follows:

- A comprehensive HIV prevalence and risk assessment of teaching staff should be undertaken as soon as possible.

- An intensive education and programme is mounted in order to confront the silence, denial, and secrecy about HIV/AIDS that still pervades the teaching profession.

- Teaching staff should be actively encouraged to test for HIV at government and other testing centres.

- Counselling and living positively support groups for teaching staff should be established throughout the country.

- With respect to deployment and transfers, more research is urgently needed in order to assess the extent and consequences of AIDS-related transfers and spouse separation.

- As the AIDS crisis deepens, additional staff will be required in order to ensure that schools are properly staffed. New staffing norms need, therefore, to be developed.

- Head teachers and other MoE managers should be more proactive in dealing with persistently sick staff. New procedures also need to be adopted in order to ensure that where sick teachers are clearly not coping, they are obliged to go on long-term sick leave.

- Given the scale of the epidemic, it is crucial that all MoE staff receive high quality medical care. A key priority is, therefore, to increase the proportion teachers who are members of the Botswana Public Officers Medical Aid Society (BPOMAS).

- With proper medical support and high levels of patient compliance, the mass provision of anti-retroviral drug therapies to teaching staff who are HIV positive would be the single most effective intervention to mitigate the impact of the HIV/AIDS on the education sector. Evidence from elsewhere indicates that this could reduce projected AIDS-related mortality rates by at least 50 percent. Members of BPOMAS are currently entitled to all single and double combination AVR therapies.

- Decisive action is required to deal with the widespread incidence of sexual relationships between male teachers and female students at secondary schools.

STUDENT ENROLMENT PROJECTIONS

Detailed demographic projections show that, as a result of the AIDS epidemic, the school-age population will be 30 percent smaller in 2010 than it would have been without AIDS. Not only will the 5-14 population (which essentially covers the first ten years of basic education) be much smaller than expected, but it is also projected to decline in absolute terms - from 422,000 in 1999 to 366,000 in 2010.

On the basis of these population projections, three enrolment scenarios for the period 1999/00 to 2009/10 are developed. The first scenario assumes that RNPE targets are met with no change in dropout and repetition rates. Under this scenario, by 2010, target enrolments for primary schooling are 10 percent lower than current levels, and junior and senior secondary enrolments will only need to increase by 17.4 percent and 23.5 percent respectively. Under the second (best case) scenario, eliminating all student dropout and repetition by 2005, would still lead to a five-percent reduction in primary school enrolments in 2010, but CJSS and senior secondary enrolments increase by 31.3 percent and 41 percent respectively.

The third scenario plausibly assumes that, with large numbers of children adversely affected by the epidemic, dropout and repetition rates will double over the next ten years and there will some

small declines in primary and CJSS intake rates. Under this scenario, total projected enrolments for all three schooling cycles are significantly lower in 2009/10 than they are now (primary minus 19.1 percent, CJSS minus 11.3 percent, and senior secondary minus 5.9). After so many years of rapid enrolment growth, such an outcome hardly seems conceivable. But, unless government and especially the MoE take appropriate action, this is the most likely scenario.

TEACHER REQUIREMENTS

On the basis of these student enrolment projections, the study presents teacher requirement projections. Three mortality scenarios are used for this modeling exercise. The best case scenario is that RNPE enrolment targets are met and teacher mortality is one-quarter projected AIDS-related mortality for the adult population as a whole. Under this scenario, a total of 5400 teachers will need to be recruited over the next ten years (2100 primary, 2900 CJSS, and 400 senior secondary). However, given projected outputs from the teacher training colleges, there will still be an excess-supply. Under the worst case scenario (lower-intakes, higher repetition and dropout and teacher mortality same as the adult population), total teacher requirement will be 7700 over this period (3400 primary, 3400 CJSS, and 900 senior secondary). If teacher mortality can be reduced to one-quarter projected adult mortality, but intake rates fall and repetition and dropout rates increase, total teacher requirement will be less than 2800 (i.e. an average of 280 per annum), in which case there would clearly be massive excessive supply of graduates. Colleges of education would need therefore to make major adjustments to their training activities i.e. switch from pre-service to in-service training.

ORGANISATION, PLANNING AND MANAGEMENT

Nothing less than a Ministry-wide mobilisation is required in order to deal effectively with the AIDS crisis. The report recommends therefore the establishment of a new organisation and management structure in order to design and implement the proposed HIV/AIDS strategy for the Ministry of Education. A dedicated (i.e. full-time) HIV/AIDS programme management team should be recruited as soon as possible. It is essential that the national director of this team has the power and authority to ensure that each department in the MoE fulfills the specific objectives of the HIV/AIDS strategy as these are operationalised in annual action plans. He/she should be supported by three national programme co-ordinators responsible for student prevention, student support, and staff prevention and support i.e. AIDS in the workplace. It is also recommended that properly funded Regional HIV/AIDS Regional Management Teams are established.

CHAPTER 1

INTRODUCTION

The HIV/AIDS epidemic poses a major threat to the education sector in Botswana. Unless decisive action is taken immediately, the very substantial gains that have been achieved in the education sector during the last 30 years will be seriously eroded. Given the gravity of the AIDS crisis, the key question is, therefore, what more must be done in order to ensure that the educational objectives that are enumerated in the 8th National Development Plan and in the Revised National Policy on Education are attained during the next 10-15 years? It is essential that a comprehensive strategy is developed by the Ministry of Education (MoE), which will guide future action in response to this crisis.

Responding decisively to the threat posed by HIV/AIDS raises fundamental questions about the overall role of schools and other education and training institutions in high prevalence countries such as Botswana. Teaching staff will be asked to take on more responsibilities to prevent and mitigate the impacts of HIV/AIDS on children and youth at a time when many are already finding it hard to cope with the normal demands and pressures of day to day teaching. As a recent report on primary school management in Botswana concluded 'the vast majority of managers are struggling hard in difficult circumstances, some rather successfully, but most of them are in trouble' (MoE/PSMDP, 2000: 61). The HIV/AIDS strategy for the education sector must, therefore, be based on a realistic assessment of what can be done by school management teams and teachers.

1.1 STUDY OBJECTIVES

Despite the potentially extremely serious impacts of HIV/AIDS on the education sector in Botswana, very little attention has been devoted to this fundamentally important problem. Surprisingly little robust research has been undertaken that systematically analyses all the key quantitative and qualitative impacts of the epidemic on the education sector.

This study focuses on three key questions. Firstly, how has the HIV/AIDS epidemic affected primary and secondary schooling in Botswana to date? Secondly, and more importantly, what will be the likely impacts of the epidemic on education provision during the next 10-15 years? And thirdly, what should be done to mitigate these impacts?

The impact of HIV/AIDS on education, especially in a high prevalence country, is multifaceted and very complex. Given time and other resource constraints, this study provides an initial assessment of current and likely future impacts of the epidemic and, on the basis of this analysis, presents a series of preliminary recommendations about what action should be taken by the MoE in the short-medium term. It is clear, however, that further research needs to be urgently undertaken in order to develop a well-conceived and detailed strategic response to this crisis. Pre-schooling, vocational education and training, and non-formal education were not included in this study.

This study forms part of a larger research project, which comprises two other country studies in sub-Saharan Africa (Malawi and Uganda), and an synthesis report.[1]

1.2 REPORT STRUCTURE

This report is divided in two main parts. The first part reviews the current situation and the second part presents recommendations about what should be done. Three main impact areas are delineated: HIV prevention among all students, the impact of the epidemic on students, and the impact on teachers and other staff.

- ***Prevention***: Under this impact area, the current efforts of the MoE with respect to HIV prevention among students are discussed, along with the views of pupils and teachers about the effectiveness of these interventions.
- ***Impact on students:*** Special attention is paid to three groups of children, namely orphans, caregivers, and children who are HIV positive.
- ***Impact on teachers and other staff***: This concentrates on the impact of the epidemic on teaching and support staff (mortality, morbidity, motivation/morale etc). Projections of teacher numbers and recruitment needs under a variety of scenarios are also presented.

1.3 STUDY TEAM

The study was jointly designed and implemented by officers from the Ministry of Education and external consultants. The study team members were:

- Dr Paul Bennell, Independent consultant and Team Leader.
- Dr Bagele Chilisa, Senior Lecturer, Faculty of Education, University of Botswana.
- Dr Karin Hyde, Independent consultant.
- Mr Archie Makgothi, Head of the Division of Planning, Statistics and Research, MoE.
- Mrs Enni Molobe, Education Officer, Division of Planning, Statistics and Research, MoE.
- Mrs Limpet Mpotokwane, Senior Education Officer, Department of Curriculum Development and Evaluation, MoE.

Dr. Chilisa with Drs Bennell and Hyde also undertook a separate study on the impact of HIV/AIDS at the University of Botswana (see DFID, 2001).

1.4 REPORT DISSEMINATION

A first draft of this report was discussed at a one-day workshop held in Gaborone on 29 November 2000. Over 80 MoE officers and individuals from other government and non-government organisations provided comprehensive and detailed feedback both on the findings and the recommendations. These have been subsequently incorporated into the final report.

[1] The Rockefeller Foundation funded this research.

1.5 ACKNOWLEDGEMENTS

The Ministry of Education, Government of Botswana and the United Kingdom Department for International Development (DFID) jointly sponsored this study. The MOE's contribution covered the time of the three MoE officers, subsistence costs and transportation for the school survey, and dissemination activities. DFID provided honoraria for the three consultants and their travel and accommodation costs as well as other incidental costs.

The study team gratefully acknowledges the assistance of the school managers, teaching staff, and students at the survey schools, as well as all the other individuals, both in the MoE and in other organisations, who were interviewed. Special thanks go to Mbakiso Chilisa and Dikeledi Mautle for data processing of the school survey and Richard Harriman and John Moir from Infinium Software.

CHAPTER 2

METHODOLOGY

2.1 GENERAL CONSIDERATIONS

This study faced a double challenge; trying to get students and teaching staff to open up and discuss very sensitive topics surrounding HIV/AIDS and to do it within a context, i.e. primary and secondary schools, that is not generally considered relevant to a sexually transmitted disease. As a consequence, an indirect approach was utilised, with every effort being made to obtain information on the 'social' as opposed to the medical symptoms of HIV/AIDS. Therefore, the focus was on indicators of orphans (number, problems and coping strategies); teacher morbidity and mortality; and knowledge of and related behaviour change with respect to HIV/AIDS. Through discussion of these issues, their relevance usually became clear to respondents. Discussions and interviews, particularly with teachers, were preceded by a clear indication that any information provided would be confidential and anonymous.

HIV/AIDS is viewed with strong emotions by almost everyone and interviewers generally had to deal with both resistance and a number of questions, concerns voiced by students, teachers and head-teachers. This often consisted of correcting misinformation or merely being supportive as respondents voiced their concerns about their job security, anxiety about contracting the virus, their worry that they may have already contracted the virus or about living and working with people who were HIV positive.

2.2 DATA COLLECTION

Three types of data were collected:

- Primary data from a representative sample of primary and secondary schools.
- Interviews with key informants in the education, health, local government, and other sectors.
- Secondary data from a variety of sources, in particular education and demographic statistics.

2.2.1 School survey

A survey of primary and secondary schools was conducted over a period of four weeks in March and April 2000. A total of 19 schools in two districts - Kweneng East (nine including three schools in Molepolole) and Northeast (10 including four schools in Francistown) were selected. HIV prevalence rates in North East District and Francistown are above the national average (third highest site out of 15 during 1998 and 1999). HIV prevalence in Kweneng East was the seventh highest during this period and is, therefore, almost the median site (see Table 2.1).

Table 2.1: HIV prevalence rates among pregnant women by sentinel survey site, 1992-1999

SITE	1999	1998	1997	1996	1995	1994	1993	1992
Gaborone	37.1	39.1	34	31.4	28.7	27.8	19.2	14.9
Francistown	42.7	43	42.9	43.1	39.6	29.7	34.2	23.7
Serowe Palapye	41.8		34.4		29.9		19.9	
Selebi Phikwe		49.9		33.1		27		
Lobatse	31.3		33.7		37.9		17.8	
Ngami Maun		33.5		33.1		19.4		12.7
Tutume		37.5		30		23.1		
Southern		24.7		21.8		16		
Kweneng East		37.2						
Kweneng West		26.5						
Chobe Kasane	50.8		38.8		37.9		18.3	
Ghanzi		22.3			18.9		9.5	
Kgatleng	29.5	31						
Mahalapye	32	28						
Kgalagadi	21.8							

Source: AIDS/STD Unit, Ministry of Health

Samples of nine primary, seven community junior secondary schools (CJSS), and three senior secondary schools were selected and visited. However, it was decided to only include schools with more than 400 students in order to ensure sufficiently large numbers of teacher and student respondents. This only slightly biases the primary school sample because over three-quarters of enrolments are accounted for by schools with 400 or more students. Nearly all secondary schools have more than 400 students.

Schools were selected from urban and rural locations, but clusters of primary and secondary schools were chosen with the same catchment areas. While it was only possible to visit a small sample of schools, the school survey is representative of the school population in each district and provides very rich and detailed information on all the key impacts of the HIV/AIDS epidemic on both primary and secondary schooling in Botswana.

The following set of data collection instruments were used:

- Head teacher semi-structured interview around identified themes.
- School data instrument – a data sheet that requested information for the past five year on teacher numbers, enrolment, repetition, dropout and absenteeism by class and gender.
- School Management Team semi-structured interview – covering the same issues as the head teacher interview.
- Individual teacher interviews – 8-10 teachers were randomly selected from each school.
- Teacher focus groups—with between 4 and 12 random selected teachers loosely structured using prepared statements.
- Teacher questionnaire (anonymous), requesting information on qualifications, experience etc and a set of statements soliciting views on the impact of HIV/AIDS at their school.

- Student questionnaire (anonymous) – group administered requesting basic background information, questions on knowledge of HIV/AIDS, sources of information, and a similar set of statements as the teacher questionnaire.
- Student focus groups—Separate groups of 6-8 boys and girls from selected standards and forms were asked to discuss and reach consensus on a range of statements concerning HIV/AIDS and their school. These were then discussed in combined gender groups.

The semi-structured interviews with the head-teacher and members of the school management team solicited their views of the impact of HIV on their school, estimates of the numbers of students affected (orphans, carers, children living with AIDS), morbidity/absenteeism and mortality among teachers, etc. These interviews were conducted in English. Interviews and discussions with teachers were conducted either in English or Setswana, depending on the language ability of the team member[2].

Forty students (from Standard 6 and Standard 7 in primary, Forms 1 to 3 in junior secondary and Forms 4 and 5 in senior secondary) were randomly selected for the group-administered questionnaire. Twelve to 16 students from the same classes were selected for a focus group discussion that used a similar approach as the teacher focus group discussions. In primary schools, the focus group included children from Standard 4 and 5 and both the discussion and the questionnaire groups were gender balanced. Setswana speakers administered both sets of instruments to all pupils.

Key points from the discussions with the head-teacher, senior management team, the teacher and pupil focus groups were written up and shared with other team members. A team meeting was held at the end of every day to review and assess the data collected from the different instruments. This triangulation was particularly important because of the nature of the study. There were highly resistant respondents in almost every school, who insisted that HIV/AIDS had never touched the school. Fortunately, there were also very open respondents. Students, in particular, were very happy to have the opportunity to discuss their anxieties and other concerns about HIV/AIDS.

Table 2.2: School survey instruments and number of respondents

Instrument	Primary	Secondary
Head teacher	9	10
Senior management team	9	10
Teacher interview	67	85
Teacher focus group	9	10
Teacher questionnaire	167	240
Student questionnaire	355	383
Student focus group	9	10

The overlap between the instruments in terms of topics was both positive and negative; views from focus groups tended to be more extreme and polarised than those from questionnaires, although not usually fundamentally contradictory. For example, a much higher proportion of focus groups would either agree or disagree on a particular issue; an indication that some muting of minority views was occurring during the discussion

[2] There was some concern initially that the difference would result in skewed results, but it was clear from comparisons made during team meetings that language did not appear to bias responses.

process. This was probably a result of the instruction that groups try to reach consensus.

2.2.2 Interviews

A total of 58 semi-structured face-to-face interviews were conducted during May and June 2000 with the following groups of individuals:

- MoE senior managers and relevant professional personnel in all departments at headquarters (with exception of non-formal education), senior managers at the regional education offices in Francistown and Molepolole, and managers and lecturers at two colleges of education (25).
- Other key ministries (DPSM (3), finance/CSO (4), health (7 including NACA), local government (6 including social workers in the two school survey districts).
- NGOs and international organisations with programmes focusing on youth and sexual reproductive health issues (6).
- Academics and other researchers (3).
- Medical aid societies (2).
- Private sector and parastatal companies (2)

Telephone interviews were also conducted with a number of other individuals, including the Botswana Teachers Union and the commander in chief of the Botswana Defence Force.

2.2.3 Secondary data

All relevant educational, financial, health, and demographic data from secondary sources was collected, in particular from demographers at the Central Statistical Office, the CSO Health Statistics Unit, DPSM, and Teachers Service Management.

2.3. LESSONS LEARNED

This is the first study in sub-Saharan Africa that uses up to date primary and secondary data to assess all types of HIV/AIDS impacts on the education sector as well as making comprehensive recommendations about what should be done. Consequently, both the study methodology and the findings themselves can be regarded as groundbreaking. However, without the benefit of being able to draw upon a lot of detailed empirical research on this topic, it is equally clear that there was a considerable amount of learning by doing.

The research strategy employed in this study was innovative in at least two respects. The first was the intensive process of consultation with head-teachers, teachers and students to discuss the impact of HIV/AIDS on them as individuals and their institutions. Second, particularly sensitive issues were addressed by asking respondents to respond to general statements rather than personal questions.

The process of data collection was itself illuminating and several lessons were learnt that could help strengthen other research and project work in the same area.

Strengths: The indirect approach and the use of trend analysis ultimately proved to be a very useful entry point in the data gathering and data analysis. The mix of instruments and the general approach was felt to be appropriate and yielded much interesting information with the combination of qualitative and quantitative information.

Data gaps: Some important information was unavailable for a variety of reasons, but is not collected by schools at present. This included information on numbers of orphans and whether they were experiencing problems in school and a clear and systematic record of teacher absences and sick leave. Head-teachers' showed a somewhat surprising lack of knowledge of official policy in several areas that directly impacted their management of HIV/AIDS related problems. For example, the regulations regarding sick leave were generally poorly known.

Weaknesses: The study in Botswana did not collect information directly from either orphans and/or their guardians. While the views of teaching staff, students, and social workers about the problems being faced by orphans were sought, clearly the conclusions reached would have been strengthened by data obtained directly from orphans themselves. The study team did not think it was appropriate to interview orphans as part of the school survey. However, with the co-operation and assistance from social workers and other officers from the Ministry of Local Government, it would have been possible to talk to these children, either individually or in groups, in their homes or other suitable venues.

Omissions: As data collection proceeded, it would have been useful to have been able to assess community reaction or views to certain of the strategies being proposed to deal with HIV/AIDS in schools or to cross-check the reported views of parents. A notable example is whether and under what conditions condoms should be distributed in schools. In addition, the views and experiences of out-of-school adolescents were not sought.

An area where much further research is necessary is the sexual behaviour of young people. The qualitative data on reported sexual behaviour of young people requires an approach that more directly and exhaustively collects information from the young people themselves.

PART I: IMPACT ASSESSMENT

CHAPTER 3

THE IMPACT TO DATE: AN OVERVIEW

Despite mounting concerns about the impact of the AIDS epidemic on educational provision in Botswana, the standard performance indicators show that there has been steady improvement in the development of the education sector during the last five years. While this does not necessarily mean that the education sector has not been affected by HIV/AIDS, to date, there appear to be relatively few discernible impacts on overall learning outcomes.

This chapter briefly reviews both the quantitative and qualitative evidence on the impact of the epidemic on primary and secondary schooling.

3.1 PERFORMANCE INDICATORS

3.1.1 Enrolments and enrolment ratios

While primary school enrolments levelled off at between 320-325,000 between 1995 and 2000, the overall numbers of students at community junior and senior secondary schools grew rapidly as the recommendations of the Revised National Policy on Education (RNPE) were progressively implemented (see Table 3.1). The primary net enrolment ratio (NER) was estimated to be 98.4 percent in 1997. However, it is difficult to derive robust NER estimates, given the likely unreliability of population projections based on the 1991 Population Census. In 1993, the National Literacy Survey found that only 4.7 percent of males and 2.2 percent of females aged between 12-19 had never been to school (see CSO, 1993). Unfortunately, there is no recent survey data on children and youth on school attendance. This information will be collected as part of the 2001 Population Census.

Nearly 80 percent of children in the relevant age group attended junior secondary school in 1996. This percentage has increased considerably since then. The overall transition rate from primary to CJSS schools was 97.5 percent in 2000. Similarly, the NER for senior secondary education has also increased significantly since the mid-1990s.

3.1.2 Repetition and dropout rates

Repetition and drop out rates for all schools in Botswana are only available up until 1997. Between 1995 and 1997, repetition rates increased very slightly among boys at primary and senior secondary schools, but among other groups of students they declined or remained unchanged (see Table 3.1). Dropout rates increased among female and male students at primary and senior secondary schools, but remain largely unchanged at junior secondary schools.

Table 3.1: Enrolments and net enrolment, repetition and dropout rates, 1995-1999

PRIMARY

Year	Total enrolments	Enrolments ('000)		Net enrol	Repetition rate		Drop out rate	
	Female	Male	Total		Female	Male	Female	Male
1995	157	157	314	96.7	2.9	2.9	0.6	0.9
1996	159	160	319	97.9	2.7	3.9	1	1.5
1997	161	161	322	98.4	2.4	3.6	1.3	1.8
1998	161	163	324	NA	NA	NA	NA.	NA
1999	161	163	324	NA	NA	NA	NA	NA

JUNIOR SECONDARY

Year	Total enrolments	Enrolments ('000)		Net enrol	Repetition rate		Drop out rate	
	Female	Male	Total	Ratio	Female	Male	Female	Male
1995	44	38	82		4.1	3.3	4.6	2.2
1996	46	40	86	78.8	3.1	2.2	4.1	2.3
1997	49	43	92		1.3	0.9-	4	2.2
1998	60	54	113		NA	NA	NA	NA
1999	60	55	115		NA	NA	NA	NA

SENIOR SECONDARY

Year	Total enrolments	Enrolments ('000)		Net enrol	Repetition rate		Drop out rate	
	Female	Male	Total	Ratio	Female	Male	Female	Male
1995	10	10	20		0.7	0.2	3.3	1.2
1996	12	11	23	31.6	0.5	0.3	4.2	1.7
1997	10	12	22		0.6	0.4	5.6	1.7
1998	15	13	28		NA	NA	NA	NA
1999	18	16	34		NA	NA	NA	NA

Repetition and dropout data since 1997 has been extracted from the annual statistical returns of the 19 survey schools. At around half the survey schools, repetition and drop out rates have increased but, except for one school, these increases have been relatively very small. Among the remaining schools, repetition and dropout rates have declined.

3.1.3 Examination results

Pass rates for all three of the main school examinations have either improved (Standard 7) or remained largely unchanged (Form 2 and 'O' level) between 1995 and 1999 (see Table 3.2).

Table 3.2: Standard 7, Junior Certificates, and Cambridge School Certificate examination results, 1995-1999

Standard 7

	GRADE					
Year	**A**	**B**	**C**	**D**	**E**	**Pass rate**
1995	8.4	24.1	38.3	29.1		70.8
1996	8.1	24.8	38	28.6		70.9
1997	3	28	47.2	18.7	3.1	78.1
1998	9.7	29.7	38.5	20.4	1.7	77.9

Form 2

	GRADE				
Year	**A**	**B**	**C**	**D**	**Pass rate**
1995	1.9	23.3	51.3	23.5	76.5
1996	1.8	24.1	50.9	23.6	76.4
1997	No exam				
1998	1.5	24.5	50.8	23.2	76.8
1999	2.1	23.1	52.1	22.8	77.3

Cambridge

	DIVISION				
Year	**1**	**2**	**3**	**GCE**	**Pass rate**
1995	9.5	30	36	24.3	75.5
1996	7.5	29.8	34.3	27.1	71.5
1997	7.8	34.5	33.9	21.8	77.9
1998	4	38	32		74
1999					

3.2 STUDENT AND TEACHER PERCEPTIONS

3.2.1 Students

In addition to the quantitative performance indicators discussed above, there is also qualitative evidence, which suggests that the impact of the AIDS epidemic on educational provision has so far been relatively limited. In particular, students sampled at the survey schools were asked to respond to the statement 'HIV/AIDS is a big problem in this school'. Among questionnaire respondents, less than 15 percent of students in both primary and secondary schools agreed with this statement (see Table 3.3). Among the focus group respondents, only one-quarter of the groups convened at primary schools agreed with this statement. Agreement rates were 8 percent and 0 percent at junior and senior secondary schools respectively.

Table 3.3: HIV/AIDS is a big problem in this school

	QUESTIONNAIRE			FOCUS GROUP		
	Disagree	Not sure	Agree	Disagree	Not sure	Agree
STUDENTS						
Primary	58	19	14	62	12	26
CJSS	52	31	15	42	50	8
Senior sec	40	48	11	50	50	0
TEACHERS						
Primary				55	45	0
CJSS				70	20	10
Senior sec				67	33	0

3.2.2 Teachers

Very few teachers perceive HIV/AIDS to be a serious problem in their schools. This is particularly the case among secondary school teachers (see Table 3.3). There are three possible reasons why individual teachers are responding in this way. Firstly, the secrecy that surrounds the whole issue of AIDS makes it difficult to reach a sound judgement about the overall impact to date. Secondly, teachers are 'in denial' and are not prepared to accept that staff and students are being affected. And, thirdly, their views accurately describe the actual impacts of the epidemic to date.

It is very difficult to try to disentangle these different reasons. Taken together though, secrecy, uncertainty, and denial are clearly important factors shaping teacher perceptions. The following verbal and written statements are typical:

'The issue of HIV/AIDS is often kept a secret. So whether a teacher, student or family member of any of the above has a problem of AIDS, it's often not easy to know. At the end of it one fails to know the extent to which the problem has affected the institution.'

'With AIDS one is not sure (of the impact) since AIDS cases are treated confidentially so one would not connect oneself about the impact of AIDS in an institution like ours.'

'HIV/AIDS in my school is not yet exposed i.e. we are not aware of these victims neither are we aware of those who have lost relatives because of HIV/AIDS.'

'It is difficult to comment because we never get to know whether someone has died of AIDS or not. The whole thing is so secretive'.

'So far there is no full evidence to prove that someone in this school has been affected by AIDS so I have no comments to make.'

'Secrecy means that everything is based on speculations'

However, many respondents stated that they had no comments to make because, in their opinion, HIV/AIDS has had no noticeable impacts on the school. For example,

'There have not been any cases of AIDS in this school, so I am not sure of the impact it could make on the school.'

'The problem at the moment does not seem to be affecting many people, if anything the numbers are less, making it insignificant i.e. its impact for now seems to be minimal because a very small number of students are absent from school. And it's quite the same with teachers.'

Over a half of all teacher questionnaire respondents made comments of this kind.

3.3 THE LEARNING CONTEXT

Although education is not compulsory in Botswana, a very strong schooling culture has developed since the 1960s; children are expected to attend primary school and most do. Relatively high levels of educational attainment among parents and expanding formal sector employment reinforce this commitment to schooling. The strong attachment to formal education is a critically important social asset, which will help to protect the education system as a whole against the potentially very serious negative impacts of the AIDS scourge.

The attainment of almost universal primary education is all the more impressive given the very high levels of poverty that still prevail in Botswana coupled with the difficult and generally unsupportive home environments, which a large proportion of children have to cope with, particularly in the rural areas. Furthermore, in many key respects, the school environment is itself not 'child-friendly'.

3.3.1 The home environment

Poverty is widespread in Botswana. According to the 1993/94 Household Income and Expenditure Survey, 47 percent of the population (38 percent of households) lived below the poverty line. The incidence of poverty is particularly high in rural areas where 62 percent of the population live in poverty and 40 percent are 'very poor'. An influential report on poverty and poverty alleviation by the Botswana Institute of Development Policy and Analysis (BIDPA) was critical of MoE policies and practices for failing to recognise and make provision for the special educational needs of children from poor families (see BIDPA, 1997).

Settlement patterns in Botswana are also an important factor. Children are left on their own with little or no adult supervision while their parents are away working on their 'lands'. These are usually too far away from the village for children to able to walk to school on a daily basis. Teachers at the survey schools located in rural areas reported that at certain times of the year, the large majority of students (both at primary and secondary school) were left to fend for themselves in this way. More generally, school managers and teachers repeatedly expressed serious concerns about the unsupportive home environments which large numbers of students come from. As has been consistently reported in other studies, alcohol abuse is widespread, which is frequently linked to sexual abuse of children by relatives and other adults.

Only 30-40 percent of students at the survey schools lives in two parent households. Even before the full impacts of the AIDS epidemic have been felt, the majority of children are either living with one parent (usually mother) or are being cared for by grandparents, siblings, and other relatives (see Table 3.4). As the BIDPA report on poverty points out 'with the breakdown of the extended family, it has become quite

common for younger able-bodied relatives to migrate and leave the elderly to look after dependent grandchildren' (op. cit. p. 263). In the early 1990s, 80 percent of births were to single mothers.

Table 3.4: Living with whom by parental status, 2000 (percentages)

PRIMARY

Living with	Both alive	Mother alive father dead	Father alive mother dead	Both dead	All
Two parents	39.5	15.4	7.1	0	34.3
Mother only	29.9	48.7	0	0	30.7
Father only	3.9	2.6	28.6	0	4.8
Grandparents	14.8	20.5	21.4	30.8	16.1
Siblings	7.4	7.7	7.1	15.4	8.2
Other relatives	3.9	2.6	14.3	7.7	4.2
Other/Ns	0.4	0	21.4	23.1	1.7

JUNIOR SECONDARY

Living with	Both alive	Mother alive father dead	Father alive mother dead	Both dead	All
Two parents	58.5	8.8	8.3	12.5	50.8
Mother only	18.8	60	0	0	25.3
Father only	2	0	0	25	26
Grandparents	8.9	4.4	25	37.5	10.3
Siblings	4.5	11.1	16.7	12.5	6.2
Other relatives	5.4	6.7	33.3	12.5	7.7
Other/Ns	1	6.6	16.7	0	2.6

SENIOR SECONDARY

Living with	Both alive	Mother alive father dead	Father alive mother dead	Both dead	All
Two parents	52.4	11.1	0	0	41.8
Mother only	26.8	61.1	0	0	30.9
Father only	1.2	0	0	0	0.9
Grandparents	6.1	11.1	20	33.3	8.2
Siblings	7.3	11.1	20	33.3	9.1
Other relatives	3.7	5.6	40	33.3	7.3
Other/ns	2.4	0	20	0	1.8

3.3.2 The school environment

The school environment is a key factor in promoting effective learning and, as the AIDS pandemic deepens, will become critically important in ensuring that children continue to attend school. Two indicators were used in the school survey in order to assess the overall nature of the school environment: the extent of fighting and bullying and the general level of fear and anxiety concerning individual safety. Both student questionnaire and focus group responses show a high level of bullying and fighting in primary and junior secondary schools, with at least half of individuals and groups agreeing to the statement that 'fighting and bullying are common in this school'. Concern about personal safety is less pervasive, although nearly a third of female questionnaire respondents at junior secondary school agreed with the statement that 'in this school, girls are fearful and anxious about their safety' (see Table 3.5)

Table 3.5: School environment statements: student questionnaire respondents -- percentage in agreement

STATEMENT	Primary	CJSS	Senior sec
Fighting and bullying are common in this school	45	49	39
In this school, girls are fearful and anxious about their personal safety	21	36	23
In this school, boys are fearful and anxious about their personal safety	17	24	20

The Baseline Survey for the Primary School Management Development Project (PSMDP) also found a high level of student concern about the hostile and unfriendly nature of the school environment (see MoE, 2000). The survey covered a representative sample of 78 primary schools across the country in October 1999. Bullying and fighting again emerged as major issues along with stealing, teachers hitting students, and teacher favouritism and lateness. More than half of parents interviewed felt that their children are not happy at school and nearly half stated that their children are 'not well cared for at school'.

Table 3.6: Students are able to discuss their problems with teachers (rounded percentages)

	QUESTIONNAIRE		
	Disagree	Not sure	Agree
STUDENTS			
Primary	38	27	32
CJSS	30	26	44
Senior sec	23	25	52
TEACHERS			
Primary	56	7	33
CJSS	37	14	44
Senior sec	24	24	50

Only a third of student questionnaire respondents at the survey primary schools agreed with the statement that 'students can discuss their problems with teachers.' The corresponding agreement rates among CJSS and senior secondary students were also low – 44 percent and 50 percent respectively. Teacher responses to this statement are very similar (see Table 3.6).

CHAPTER 4

HIV/AIDS PREVENTION FOR SCHOOL STUDENTS

This chapter addresses three related questions:

- What has been done - by government, MoE, and other organisations - to educate young people about HIV/AIDS?
- To what extent have young people and, in particular, schoolchildren changed their sexual behaviour in ways that make them less likely to become infected with HIV?
- How successful has school-based HIV/AIDS education been in informing children about the causes and consequences of this scourge, and improving their capacity to lead healthy lives?

Preventing HIV infection among children and youth is of paramount importance in stemming the AIDS epidemic. It is generally accepted, therefore, that schools have a key to role in promoting attitudes and imparting knowledge and skills that will encourage young people to behave in ways that will minimise the risk of infection. In part, this is because schoolchildren are a 'captive audience'. However, research worldwide clearly shows that sexual and reproductive health education is most effective when it is taught before children become sexually active (WHO, 1993; Kirby et al, 1994). Table 4.1 shows the age distribution of schoolchildren in Botswana. Even at primary schools, over 60 percent of students are 10 years and over. Almost 95 percent of junior secondary school students are over 14 years old by the time they are admitted to Form 1.

Table 4.1: Age distribution of students at schools, 1997 (percentages)

Age range	5 to 9	10 to 14	15-19	20-24
Primary	38.7	55.7	5.6	0
CJJS	0	5	93.7	1.3
Senior secondary	0	0.1	79.3	20.6

There is remarkably little up to date information on the sexual behaviour of young people in Botswana. However, impressionistic evidence strongly suggests levels of sexual activity are high among adolescents. A recent study of the sexual behaviour of students at the University of Botswana found that that only 2 percent of females and 20 percent of boys were 'sexually active' by the age of 14 (see Jack et al, 1999). However, by the time they had reached 18 (when most children are still in CJSS), nearly half of all girls and two-thirds of boys had experienced sexual intercourse (see Table 4.2).

Table 4.2: Age of first sexual intercourse among University of Botswana students, mid 1999 (cumulative percentages)

AGE	12	13	14	15	16	17	18	19
Females	1	1	2	10	14	32	46	82
Males	6	13	20	23	28	53	67	91

Source: Jack et al, 1999

As is well known, young women are, for mainly physiological reasons, particularly vulnerable to contracting HIV. It is estimated that 35.5 percent of all HIV infection among females in Botswana occurs between the ages of 15 and 19. Among males, this figure is 14 percent (see AbT, 2000). Thus, with most children completing ten years of basic education, a high proportion of infection occurs while children are still at school.

Young people are at risk not only as a result of their own behaviour, but also the behaviours of others. Again, there is a paucity of information, but rape and other forms of involuntary sexual behaviour are commonly reported in the media and have been highlighted in other research studies.

4.1 HIV/AIDS EDUCATION

4.1.1 The national policy framework

During the 1990s, the AIDS/STD Unit in the Ministry of Health (MoH) had overall responsibility for HIV/AIDS education and prevention in Botswana. An ambitious programme of information dissemination was developed. This largely comprised of conventional information methods (advertising billboards, flyers, pamphlets, radio and TV messages and programmes, employer sensitisation) as well as condom distribution.

MoH direct interventions in schools have been relatively limited. Not only is AIDS education for schoolchildren considered to be the primary responsibility of the MoE itself, but the Ministry of Health felt that the MoE was better prepared than other ministries in this area. Consequently, the MoE could be largely left on its own to develop and deliver HIV/AIDS programmes for school-aged children.

4.1.2 School-based interventions

The MoE issued a short policy statement on HIV/AIDS in September 1998. The statement focuses mainly on the importance of developing effective HIV/AIDS education for students. "The key aim is to equip all with skills, to develop attitudes and practices to curb the spread and manage HIV/AIDS". The following objectives are enumerated:

- HIV/AIDS should be integrated into education at all levels and made compulsory.
- Content and methodology should be age appropriate.
- All staff should share responsibility in HIV/AIDS education.
- In-service courses should be developed and implemented to disseminate information on HIV/AIDS.

- In-service curriculum and an implementation plan to be developed in collaboration with Ministry of Health.
- AIDS counselling should be included in the training of guidance and counselling teachers.
- PTAs and the community should be involved in AIDS education.

Integration and infusion: The MoE has adopted a policy of 'integration and infusion' of HIV/AIDS education in all subjects. An important justification for this integration approach is that the curriculum is already too over-crowded for it to be possible to introduce HIV education as a separately timetabled subject, as is the case in some countries (for example, Zimbabwe).

The Department of Curriculum Development and Evaluation (CD&E) has had overall responsibility for the integration of HIV/AIDS topics into the overall curriculum. The HIV/AIDS topics that are covered in various subjects at primary, junior and senior secondary schools are summarised in Annex 1. HIV/AIDS is first introduced as a sub-topic within the science curriculum in Standard 7 where the specific learning objective is to "describe how STDs and AIDS are caused, spread and how they can be avoided".

At junior secondary school, HIV/AIDS topics are covered in more depth in Moral Education and Science. The revised curriculum for Art and Design and Technology is also infused. The moral education curriculum seeks to inform and sensitise students on a wide range of issues. These include living positively with HIV/AIDS, popular myths, consequences of HIV infection for family and community, the role of religion in controlling spread of HIV, making AIDS victims feel more accepted, and issues of death, bereavement, and suicide. The science curriculum focuses on the methods of transmission, symptoms and includes a sub-topic on the statistical interpretation of HIV prevalence statistics. The guidance and counselling module in the Family Life Education curriculum also has relevant topics, including distinguishing between facts and myths, safe ways of helping an AIDS patient, stress management for STD and AIDS patients, and the socio-economic impact of the epidemic.

Much less attention is given to HIV/AIDS topics in the senior secondary curriculum. Explicit mention of AIDS is made in design and technology (safety issues), in geography (definition, interpretation of HIV/AIDS statistics, socio-economic impact of HIV/AIDS, and efforts being taken to address problem*),* and science (causes, transmission, symptoms/ signs and treatment).

Teacher training institutions have also been requested to infuse HIV/AIDS education into the teacher-training curriculum. However, while several departments have developed proposals for infusion, these yet to be formalised.

HIV/AIDS education materials that have been developed by the World Health Organisation are currently being piloted among Standard 7 students. Once these have been revised, they will be distributed to all primary schools in early 2001.

Guidance and Counselling: Guidance and counselling activities in schools date back to the early 1960s. However, formalised G&C services with properly trained teaching staff were virtually non-existent in most schools. The National Commission on Education

(which reported in 1992) highlighted the importance of G&C in the overall education process. Comprehensive policy guidelines for G&C were subsequently introduced in 1996. Since then 'one of the key goals of the Department of Curriculum Development and Evaluation has been to incorporate guidance and counseling into the primary and secondary curricula' (MoE, 1999:23).

G&C curricula have now been developed for CJSS and senior secondary schools, and CD&E is currently working on guidelines for primary education. CD&E also conducts in-service training workshops for G&C teachers. Each school is supposed to have its own G&C teaching staff and committee. Secondary schools are required to allocate one period a week for G&C and a departmental head post for G&C has been established in most schools. Every secondary school now has a G&C teacher, but this is only a half-time post. In primary schools, guidance principles are supposed to be infused throughout the curriculum. While G&C teachers have been appointed, they still have their own classes and carry a full teaching load. All G&C teachers are also expected to provide pastoral care for students on an individual basis.

4.1.3 NGO programming

There is a small number of NGOs in Botswana, which are providing SRH services for young people.

Youth-friendly clinics: Four youth-friendly clinics have recently been established by the Botswana Family Welfare Association, the Botswana National Youth Council, and the YWCA. Eight general-purpose youth centres were planned as part of NDP8, but have been shelved for the time being.

Peer-education: The YWCA started the Peer Approach Counselling for Teenagers (PACT) programme for young people in the late 1980s. Many secondary schools have had PACT peer educators, but no systematic impact evaluation has been undertaken. Funding dried up in the mid-1990s. However, concerted efforts are now under way to reactivate the programme with donor support. Peer education activities (such as 'Expanding Visions') are also organised from the youth clinics.

Social marketing of condoms: Population Services International has a very successful programme for the social marketing of condoms. Botswana has the highest per capita condom use among the fifty countries where PSI has on-going programmes. A total of 220,000 condoms were sold in 1999. PSI staff visits secondary schools when invited, but its condoms are not actively marketed in schools. PSI condoms were only sold at one senior secondary school tuck shop in mid-2000.

Media: 'Straight Talk' and other radio programmes are very popular among young people and have large audiences. However, to date, only a limited amount of good quality print media has been available. PSI is currently adapting the 'Soul City' magazine, which has been very successful in South Africa, for dissemination in Botswana.

4.2 TRENDS IN ADOLESCENT SEXUAL BEHAVIOUR

4.2.1 National surveys and statistics

There is no good quality, time series data on the sexual behaviour of school-aged children in Botswana. Comprehensive, nationwide monitoring surveys of youth sexual behaviour were undertaken in 1992, 1994 and 1996. However, only young people between 18-25 were included and, as a result of 'funding constraints', no further surveys have been sponsored by the MoH for the last four years.

The findings from these monitoring surveys showed that young people had already made some important changes to their sexual behaviour by the mid-1990s. In particular, while there was no significant reduction in the number of partners, condom use increased markedly (see MoH, 1994 and 1996). Depending on location, in 1994, between 45-65 percent of males and 20-30 percent of females had more than one sexual partner in the previous 12 months. The average number of partners increased for males between 1992 and 1994. In 1994, 70-80 percent of respondents stated that they 'always' or 'almost always' used a condom with casual partners. Thus, 'the message on condom use has been considerably more successful than the message about reducing the number of partners' (SIAPAC, 1994). Another major finding of these surveys was that those with lower educational attainment were most involved in high-risk behaviours.

The CSO Health Statistics and the AIDS/STU Unit ante-natal clinic sentinel surveys are the only available sources of information from which national trends in youth sexual behaviour and likely risk to HIV infection can be deduced for more recent years.

HIV prevalence: HIV prevalence among 15-19 year old pregnant women doubled from 16.4 percent in 1992 to 32.4 percent in 1995. It remained at 27-28 percent between 1996 and 1998, but declined very significantly to 21.5 percent in 1999. If this fall is sustained, then it appears that rates of infection among youth have begun to decrease very markedly in recent years.

Teenage pregnancy: According to the 1988 Demographic and Health Survey, among 20-24 year old women, 1.6 percent had had a child before they were 15, and 25.6 percent before they were 18. Ten years later in 1998, the pregnancy rate for under-15s was 0.28 percent and 8.1 percent among the 15-19 age group (see Table 4.3).

Table 4.3: First ante natal visits by age group, 1994-1999

Age group	1994	1995	1996	1997	1998	%change 94-98	%94 pop	%98 pop
<15	399	339	349	288	303	-24.1	0.41	0.28
15-19	9032	8582	8031	7967	8036	-11	10.6	8.1
20>	31544	31573	30533	31226	31076	-1.5	4.7	4.1

Source: CSO, Health Statistics Unit

Rates of teenage pregnancy appear, therefore, to have dropped very dramatically during the 1990s. The very rapid expansion of junior secondary education since the mid-1990s means that most children under 18 now attend school. While this is undoubtedly a key reason for the fall in teenage pregnancy, given high reported levels of sexual activity, increased contraceptive use is also likely to be an important contributory factor.

Pregnancy data contained in the Annual Statistical Returns from samples of schools (10 percent primary and 20 percent secondary) was also analysed for 1999. Among the 70 primary schools, the pregnancy rate was 0.03 percent, which is eight times lower than

the pregnancy rate for the under 15 population as a whole. The pregnancy rates among the samples of secondary schools were 2.03 and 2.8 percent for junior and senior secondary schools respectively. The corresponding figures for 1997 were 1.92 percent and 3.0 percent. In 1997, 54 percent of female dropouts in senior secondary schools and 47.8 percent in CJSS were due to pregnancy.

Sexually transmitted diseases: For the female population as a whole, the number of STD attendances increased by 7.6 percent between 1994 and 1998, but fell by 17.8 percent among males. However, among children aged 5-14, STD attendances fell by 26.9 percent among females and 49.4 percent among boys during the same period (see Table 4.4). The overall incidence of STDs among this group was 0.9 percent for girls and 0.5 percent for boys. Unfortunately, age-disaggregated data is not requested from the clinics for the over 15 age group.

Table 4.4: Total STD attendances by age and gender, 1994-1999

Age	**1994**		**1998**		**% change**		**% total pop 1994**		**% total pop 1999**	
group	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
<5	372	241	339	147	-8.9	-39	0.3	0.23	0.17	0.07
5 to 14	2643	2112	1931	1069	-26.9	-49.4	1.37	1.11	0.9	0.51
15>	111801	95532	121296	79278	8.5	-17.1	25.1	24.4	17.7	23.1

Contraception: The number of family planning visits for condoms has increased very rapidly - from 283,000 in 1994 to 491,400 in 1998 (see Table 4.5). Unfortunately, the CSO Health Statistics Unit does not request information on the age of individuals who visit family planning clinics.

Table 4.5: Family planning attendance, 1994-98 ('000)

Number visits	**1994**	**1995**	**1996**	**1997**	**1998**
Condoms	283.3	305.5	413	418.1	491.4
ALL	536.4	568	676.5	671.4	755
Condoms % total	52.8	53.8	61	62.3	65.1

4.2.2 Other information

School surveys: The school survey did not attempt to collect systematically detailed information on the sexual behaviour of children. However, in contrast to the national statistical data, there is little evidence to show that children have significantly changed their sexual behaviour. Love relationships among secondary students are reported to be common and pregnancy is a 'big problem' (see Table 4.6).

Table 4.6: Statements concerning student sexual behaviour (percentages)

Love relationships among students are common in this school

	QUESTIONNAIRE			**FOCUS GROUP**		
	Disagree	Not	Agree	Disagree	Not sure	Agree

		sure				
STUDENTS						
Primary	34	21	29			
CJSS	16	15	68			
Senior sec	4	7	88			
TEACHERS						
Primary				55	27	18
CJSS				29	14	57
Senior sec				50	0	50

Student pregnancy is a big problem in this school

	QUESTIONNAIRE			**FOCUS GROUP**		
	Disagree	Not sure	Agree	Disagree	Not sure	Agree
STUDENTS						
Primary	40	11	26			
CJSS	19	11	56	0	0	100
Senior sec	5	7	88	0	0	100

Students are changing their behaviour in response to this curriculum

	QUESTIONNAIRE			**FOCUS GROUP**		
	Disagree	Not sure	Agree	Disagree	Not sure	Agree
STUDENTS						
Primary	29	20	44			
CJSS	36	40	15	8	25	67
Senior sec	44	35	18	100	0	0
TEACHERS						
Primary	58	30	11			
CJSS	48	41	10	75	25	0
Senior sec	68	28	2	75	25	0

Most teachers do not believe that students have significantly changed their sexual behaviour. The following are typical written comments from their questionnaires:

'Given the energetic and flamboyant behaviour of our students, they'd have to be affected one way or another.'

'Even though we teach about HIV/AIDS and the dangers sexual intercourse, are the students really taking in the seriousness of the matter? Morality is low and thus promiscuity high.'

'Students are actively involved in sex without taking proper precautions. Most of them have casual sex with many partners, especially because of their basic needs or lack of morals Students delay a lot after school and most of them reach home very late in the evening. Those who are unfortunate to walk alone after darkness can be raped or seduced.'

'Evening entertainment e.g. beauty contests should be cancelled by law until this issue of HIV/AIDS is under control. It is at these functions that pupils and other youngsters abuse alcohol and other drugs and when intoxicated they lose their ability to make firm concrete decision to refuse unprotected sex.'

'At primary, 'sporting events' with over night stays major opportunity for sexual experimentation and possibly harassment.'

Not surprisingly, fewer than ten percent of teachers agreed with the statement that 'students are changing their behaviour in response to the HIV/AIDS education curriculum (see Table 4.6).

Student responses were somewhat more mixed and there are inconsistencies between the results of the questionnaires and focus groups. However, among secondary students, where the level of sexual activity is known to be relatively high, more than 80 percent of questionnaire respondents indicated that students have not significantly changed their sexual behaviour. The following comments from secondary students are typical:

'Students in this school seem not to have a serious belief in HIV/AIDS. Although most understand a lot about it, sexual intercourse is very common.'

'Most of the students in this school drink too much alcohol, which leads them into many troubles. Alcohol can lead one to being raped and can lead one to rape. Boys become weak after drinking and are unable to control themselves.'

'There is a lot to be done about the rate of pregnancy in my school as this can lead to being infected. Teachers are trying, but this does not seem to convince students.'

'Students in my school make me afraid because most of them have more than one partners Girls have the right to say a big no to sex and boys shouldn't be controlled by their feelings.'

'Students have unprotected sex because they want to show their partners love.'

'Young girls have sexual relations with people who have finished school, these guys drink and smoke'

'The main problem is that boys are after sex and girls are after money.'

'The students in my school do not care about AIDS, they are mostly interested in love affairs.'

'Young people only believe HIV is a reality when they get it.'

'Most girls in this school don't care about their lives because they like older men.'

Other studies have reported similar patterns of behaviour among youth. In particular, a recent situational analysis of HIV/AIDS in Kweneng East District[3] (where nine of the survey schools are located) made the following observations:

- Many parents do not properly 'control' their children. 'Youth are described as roaming the villages moving from one liquor outlet to the other.'
- 'Sex for drink' is common.
- Botswana society is too 'permissive and bordering on lawlessness'.
- No serious attempts have been made to breakdown cultural barriers that discourage meaningful discussion between children and parents on matters of sexuality.
- Sex tends to be an 'important activity' for the unemployed and the poor.
- 'Failure to please one's partner can lead to abandonment and loss of income (however meagre)'

Similarly, the UNDP situational analysis for the North East District concluded that 'youth behaviours do not indicate a positive change of attitude concerning the risk of contacting the virus'. The majority of youth are still motivated by high risk factors and many 'do not believe that HIV/AIDS is real' (UNDP, 2000: 15).

4.3 STRENGTHS AND WEAKNESSES

Drawing on the main findings of the school survey, the following discussion highlights the main strengths and weaknesses of HIV/AIDS education in schools in Botswana.

4.3.1 Information sources

Student questionnaire respondents were asked to identify the three most important sources of information on HIV/AIDS. Table 4.7 shows that radio programmes are by far and away the most important source of information for all school children, regardless of age. While teachers were only mentioned by 30 percent of primary school children, they are the second most source of information among both junior and senior secondary students.

In a survey conducted in 1992, 30-40 percent of youth respondents stated that school was a reliable source of information (see SIAPAC, 1992). It does not appear therefore that the integrated and infused curriculum has so far resulted in any noticeable increase in the relative importance of schools as a source of information.

The role of parents in providing information on SRH is worryingly low. This is despite the fact that parents of students at the survey schools have high levels of educational attainment compared with most other countries in sub-Saharan Africa. Over two-thirds had completed primary schooling. (see Table 4.8). What is particularly surprising is that there appears to be no positive correlation between the importance of parents as a source of information on SRH issues and the level of parental educational attainment (see Table 4.9).

[3] This study was sponsored by UNDP

Table 4.7 Main information sources on sexual and reproductive health issues: Student questionnaire responses

Information source	PRIMARY		CJSS		SENIOR SECONDARY	
	Female	Male	Female	Male	Female	Male
Radio	86	86	75	70	73	76
Print media	50	52	43	39	48	39
Posters	15	9	7	3	5	15
TV	33	35	26	37	27	24
Parents	17	14	27	24	32	28
Medical personnel	38	49	42	47	32	33
Friends	9	7	8	12	9	6
Teachers	31	29	46	48	38	52
Relatives	1	3	1	6	2	2
Church	12	5	9	5	7	15
Other	1	3	0	0	4	0

Table 4.8: Educational attainment of parents at survey schools, 2000 (percentages)

	Primary		Junior secondary		Senior secondary	
Parental education	Father	Mother	Father	Mother	Father	Mother
Never been to school	14.9	9	14.3	9.5	18.2	11.8
Some primary	19.4	18.9	17.2	21.6	17.3	21.8
Completed primary	17.7	26.8	13.6	22	17.3	20
Some secondary	11.3	13.8	16.8	19.8	11.8	20
Completed secondary	16.1	16.3	8.4	9.9	3.6	6.4
College/university	17.7	13.2	20.9	13.6	17.3	17.3
Other/not specified	2.8	2	8.8	3.7	14.5	2.7

4.3.2 Knowledge and attitudes

Student questionnaire respondents at all the survey schools were given 11 simple statements on different aspects and common misconceptions concerning HIV/AIDS and asked to indicate whether they were true or false. Table 4.10 shows the percentage of students who answered these statements incorrectly.

Table 4.9: Parents as a source of information on sexual reproductive health by educational attainment of the parent (percentages)

Parental education	Primary	Junior secondary	Senior secondary
MOTHER			
None	15.6	5.7	12.1
Some primary	14.9	21.4	15.2
Completed primary	14.7	17.1	18.2
Some secondary	24.5	20	24.2
Completed Form 5	12.1	12.9	12.1
Tertiary	12.8	20	15.2
FATHER			
None	17	15.7	12.1
Some primary	15.9	11.4	15.2
Completed primary	19	8.6	18.2
Some secondary	12.5	21.4	12.1
Completed Form 5	17.5	12.9	0
Tertiary	11.1	27.1	24.2

Source: School survey, 2000

Table 4.10: Student knowledge about HIV/AIDS: percentage of questionnaire respondents giving incorrect answers

STATEMENT	PRIMARY				CJSS		SENIOR SECONDARY	
	FEMALE		MALE		FEMALE	MALE	FEMALE	MALE
	Std 6	Std 7	Std 6	Std 7				
Traditional healers can cure aids	20	12	18	9	7	11	2	2
You can get AIDS by sharing materials with students who are HIV positive	43	14	46	17	4	4	2	2
Only immoral people get AIDS	75	57	65	49	8	13	9	17
It is possible to get AIDS from a toilet seat	27	17	32	17	28	22	36	22
The most common way of getting AIDS is through sexual intercourse with an infected person	7	5	16	10	7	5	0	2
Pregnant women can pass AIDS to their unborn children	14	9	16	11	4	6	0	7
You can simply tell by looking that someone is HIV positive	60	62	72	56	24	23	16	26

One can get AIDS by donating blood	43	51	54	58	29	41	32	37
There is no cure for AIDS	27	14	29	18	11	11	7	13
Using condoms helps to prevent AIDS	6	13	11	9	18	19	14	15
Having sex with a virgin is one way to cure AIDS	32	22	34	30	4	12	2	2

While student knowledge about HIV/AIDS is quite good and there is a definite learning curve from the senior primary school standards onwards, some major knowledge gaps still exist. A common misconception among primary school children is that AIDS is a disease of immoral people; three-quarters of girls and nearly 60 percent of boys in Standard 6 percent agreed with the statement that 'only immoral people can get AIDS'. Over one-half of primary school and almost one-quarter of secondary school students believe that 'you can simply tell by looking that someone is HIV positive'. However, much higher percentages of school children in other countries answer this ('looks can kill') statement incorrectly (see Pretty, 2000). While misconceptions that 'traditional healers can cure AIDS' and 'having sex with a virgin is one way to cure AIDS' are quite common among primary school students, only two percent of senior secondary students believe these statements.

Two misconceptions, that it is possible to get AIDS from a toilet seat and that one can get AIDS by donating blood showed little evidence of a learning curve, with the percentage getting it wrong remaining stable or increasing with age. Gender differences appear for a few items. Primary school girls are less likely than boys not to know that sexual intercourse is a major form of transmission. Boys at CJSS are more likely to believe that having sex with virgins is a way of curing AIDS. One disturbing result is that 10 percent of secondary school students believe that there is a cure for AIDS. Nearly 20 percent of boys at senior secondary school still believe that one can tell who has AIDS by just looking. Clearly, there is still room for improvement in student knowledge about HIV/AIDS; by the age of 12 and 13 children should have a solid grasp of the basic facts of HIV/AIDS and also be armed with knowledge that can discount some of the most common myths.

4.3.3 Curriculum content

Student assessment of overall usefulness and relevance: Student questionnaire respondents were asked to assess the usefulness of seven key areas of the HIV/AIDS curriculum and family life education. Table 4.11 shows that 45 percent of Standard 7 primary school students indicated that they have never been taught basic information about HIV/AIDS and the importance of sexual abstinence and protected sex. For topics such as 'dealing with threats and violence' and 'being assertive', these percentages are well over 50 percent. When, however, these topics have been taught, almost all students rate them as being 'very useful'.

Table 4.11: Student assessments of usefulness of HIV/AIDS education topics (percentages)

PRIMARY SCHOOL STUDENTS:STANDARD 6

TOPIC	Never been taught	Not at all useful	Not useful	Slightly useful	Useful	Very useful	No response
Basic knowledge	56	3	2	1	5	19	14
Delay sex	56	1	1	5	7	17	13
Protected sex	54	2	2	2	7	21	13
HIV testing	56	3	3	3	4	15	15
Dealing with threats and violence	61	2	2	6	3	13	14
Being assertive	57	2	3	3	6	15	15
Care and support	55	2	3	2	4	23	11

STANDARD 7

TOPIC	Never been taught	Not at all useful	Not useful	Slightly useful	Useful	Very useful	No response
Basic knowledge	45	1	2	4	7	37	4
Delay sex	45	0	1	3	7	37	5
Protected sex	46	1	1	3	4	41	4
HIV testing	51	0	3	3	7	32	4
Dealing with threats and violence	60	2	0	3	7	24	3
Being assertive	53	0	1	3	5	33	4
Care and support	47	1	2	1	5	42	3

JUNIOR SECONDARY SCHOOL STUDENTS

TOPIC	Never been taught	Not at all useful	Not useful	Slightly useful	Useful	Very useful	No response
Basic knowledge	5	2	2	4	15	55	18
Delay sex	6	4	8	7	13	41	21
Protected sex	3	4	3	6	14	51	20
HIV testing	13	3	4	7	14	40	19
Dealing with threats and violence	11	10	6	12	27	23	22
Being assertive	9	5	4	7	19	30	25
Care and support	4	2	2	5	14	49	24

SENIOR SECONDARY SCHOOL STUDENTS

TOPIC	Never been taught	Not at all useful	Not useful	Slightly useful	Useful	Very useful	No response
Basic knowledge	3	1	1	6	20	31	38
Delay sex	7	2	5	6	16	26	38
Protected sex	0	0	0	8	10	42	40
HIV testing	5	1	3	4	20	26	42

Dealing with threats and violence	10	7	6	8	7	16	45
Being assertive	9	1	4	14	17	7	48
Care and support	2	0	0	5	11	40	43

Nearly all CJSS students have been formally taught these topics and most rated teaching in these areas as 'very useful' and 'useful'. Very high no-response rates among senior secondary students (ranging from 38 percent to 48 percent) make it very difficult to reach any firm conclusions with respect to this group.

All students found the following three topics particularly useful: basic knowledge, protected sex and the care and support of those affected by AIDS. Secondary school students rated delaying sex and dealing with threats and violence as least useful. The unpopularity or lack of relevance of the latter topics is unfortunate. In at least one country (Uganda) that has reported substantial declines in HIV prevalence, this has been attributed to significant reduction in prevalence among the 15-19 age group, fuelled primarily by delay of sexual initiation. Secondly, it has been well documented that the sexual initiation of a significant proportion of young women in Botswana and elsewhere in Africa is accompanied by force (Stegling 2000 for Botswana; Helitzer-Allen 1994; Uwake et al 1994; A. Ajayi, personal communication).

Student satisfaction with the overall amount of information being provided at schools varies considerably among the three types of schools. Three-quarter of CJSS focus groups agreed with the statement that 'students get all the information and advice they need about HIV/AIDS. However, only one-third of the student focus groups in primary and secondary schools agreed with this statement (see Table 4.12). Their main criticisms are that the curriculum is too academic and superficial, and does not address the basic concerns of students. There is an urgent need for more 'hard-hitting' print and audio-visual learning materials. A common plea is that we should be shown 'videos of people with AIDS' and that 'we should be taken to hospitals and shown AIDS patients'.

There are important concepts and facts about HIV/AIDS that are currently missing from this syllabus; namely, the active promotion of abstinence (or delay of sexual initiation); life skills (assertiveness and negotiation for example) that will help children to avoid sex if they want to. The overall treatment of puberty could be considerably improved by including discussions of the emotional changes accompanying adolescence, particularly sexual feelings. Students need advance knowledge so that they are more able to handle these feelings and less vulnerable to the common myths that insist that all sexual impulses should be expressed through sexual intercourse.

Teacher assessments: Most teachers think that the sexual and reproductive health curriculum in both primary and secondary schools is poorly designed (see Table 4.12). This is mainly because it is too superficial and does not focus sufficiently on the life skills that are needed by young people in order to avoid high-risk sexual behaviour.

4.3.4 Curriculum delivery

Although the integration and infusion of the HIV/AIDS curriculum was supposed to have introduced in 1996 in both primary and secondary, the findings from the school survey reveal that implementation has been relatively slow.

Teacher credibility, commitment, and competence: Only around one-third of both primary and secondary teachers agreed with the statement 'teachers are confident teaching the (SRH) curriculum'. Lack of proper training is a major factor (see Table 4.12). Most teachers feel very uncomfortable teaching SRH topics. The following comments from teachers are typical:

'Teachers only mention or talk about AIDS in passing. So students do not take the AIDS issue seriously…When you tell them that they should refrain from unsafe sex, they think it is an empty threat'

Table 4.12: Statements on the design and delivery of HIV/AIDS education

Students get all the information and advice they need about HIV/AIDS

	FOCUS GROUP		
	Disagree	Not sure	Agree
STUDENTS			
Primary	50	15	33
CJSS	25	0	75
Senior sec	67	0	33

The curriculum on health and sexual behaviour is well designed

	FOCUS GROUP		
	Disagree	Not sure	Agree
TEACHERS			
Primary	55	9	27
CJSS	76	14	0
Senior sec	100	0	0

Teachers are confident teaching this curriculum
Topics on AIDS are well taught in this school

	QUESTIONNAIRE			FOCUS GROUP		
	Disagree	Not sure	Agree	Disagree	Not sure	Agree
STUDENTS						
Primary	39	19	24	50	17	33
CJSS	10	9	44	25	17	58
Senior sec	21	16	63	17	50	33
TEACHERS						
Primary	41	32	24	36	27	36
CJSS	32	37	29	71	0	29
Senior sec	50	33	15	50	25	25

Teachers are properly trained to deliver sexual and reproductive health curricula

	QUESTIONNAIRE			FOCUS GROUP		
	Disagree	Not sure	Agree	Disagree	Not sure	Agree
TEACHERS						
Primary	32	25	8	73	9	18
CJSS	52	21	25	100	0	0
Senior sec	63	19	13	100	0	0

'We teachers are not secure because when we teach our students about HIV/AIDS, we tend to be encouraging students to be actively involved in sexual relationships. And we are criticised for this by the parents.'

'Most teachers can't even face up to their own sexuality so what chance is there of their being able to teach children about these sensitive issues'

Many teachers question the role and/or capacity of schools to change sexual behaviour. As one primary teacher put it 'What can we do when parents and other adults continue to engage in high risk sexual behaviour?' A common sentiment among teachers is that it is parents themselves who must take primary responsibility for providing their children with relevant information concerning HIV/AIDS prevention.

At primary schools, student views on teaching quality in this area are broadly in line with teachers' own self-evaluations: Only one quarter of primary school students agreed with the statement that 'topics on HIV/AIDS are taught well in this school'. However, secondary school students are a lot more positive. Two-thirds of questionnaire respondents agreed with the above statement.

The written comments of students do nevertheless reveal widespread concerns among students about the credibility, commitment and competence of teachers with respect to the SRH curriculum:

'The main problem is that students do not believe or listen to teachers'

'Students do not listen well when they are taught about HIV/AIDS, they treat it as a joke.'

'We are not given enough information about HIV/AIDS and only a few teachers talk about it with us.'

'Students always laugh when the teacher says anything about taking care of our bodies.'

'Most students like making noise when it is time for HIV/AIDS guidance, saying it is a daily issue in the city.'

'We are not taught seriously and most teachers will tell you to go to the clinic for information.'

Many students feel that because teachers are unwilling to discuss SRH issues in depth, they tend to shy away from student questions or even become hostile. But many students are themselves reticent about openly asking questions about HIV/AIDS. Commonly cited reasons are fear of being accused of being HIV positive, fatalism (i.e. there is no point because 'we are all dead already'), and teachers will betray their confidence and discuss their concerns and problems with other teachers.

Training: Pre-and in-service training on SRH issues is very limited. Teacher trainers themselves report the same intense embarrassment about discussing sexual issues with students as secondary and primary teachers.

Reliance on non-teaching personnel: Most primary schools rely very heavily on nurses and family welfare educators to give talks to large groups of students (usually Standards 5 and 6) on HIV/AIDS prevention. However, most survey schools reported that these visits only take place once or twice a year. While the knowledge and overall confidence of nurses and FWEs impresses teachers, students tend to regard these visits as just more 'talk, talk, talk'. Furthermore, they do not deal with more difficult

issues that students often have to wrestle with (for example, negotiating condom use, especially with older men/sugar daddies).

Parental resistance: The majority of teacher questionnaire respondents at both primary and junior secondary schools agreed with the statement that 'parents do not want teachers to teach sex education to their children' (see Table 4.13). At the same time, however, there are still strong cultural taboos in Botswana about discussing sexual matters between individuals of different generations. As noted earlier, the majority of parents are not an important source of information on SRH issues.

'Unless what we teach is reinforced at home by parents and guardians, the problem will get worse'

'Teachers in schools sometimes have misunderstandings with parents who say that if we teach their children about condoms and STD/AIDS we encourage or teach their children about how they must practice sex and ask them to do it.'

The initial interventions by the MoH in schools during the late 1980s and early 1990s were, in the words of a senior MoE manager, 'too direct and offended parents'. The distribution of condoms with little or no education and counselling was particularly controversial.

Table 4.13: Teacher focus group responses to the statement: parents do not want teachers to teach sex education to their children

	FOCUS GROUP		
	Disagree	Not sure	Agree
TEACHERS			
Primary	18	9	73
CJSS	14	29	57
Senior sec	25	50	25

However, there are those both inside and outside schools who argue that teacher complaints about parental resistance to SRH education are over-stated and that this is merely a way of covering up for their own lack of commitment and competence to teach this curriculum

4.3.5 Contraception

Whether condoms should be distributed in schools remains a highly contentious issue. Many teachers have religious and moral objections and/or are concerned that 'simply handing out condoms encourages children to have sex' and is more likely, therefore, to lead to higher levels of HIV infection. However, other teachers argue that, with so many students sexually active, they feel that they have a responsibility to ensure that these children have access to condoms. For example, at one of the survey primary schools, some teachers discretely place condoms at various locations in the school and make sure that condoms are available when children go on school trips. Senior MoE management are also concerned that the distribution of condoms without proper guidance will 'back-fire', in particular because parents will be 'outraged'.

4.3.6 Peer education

Table 4.14 shows that only one-quarter of secondary school have active HIV clubs and these clubs hardly exist at all in primary schools.

Table 4.14: HIV classes and HIV clubs at survey schools, student responses, March-April 2000

	HIV CLASSES			HIV CLUBS		
SCHOOL TYPE	Female	Male	Both	Female	Male	Both
Primary	41.5	44.7	43.2	4.1	7.5	6.4
CJSS	82	67.2	74.7	24.5	15.7	19.6
Senior secondary	53.7	60.7	57.3	25	16.7	20.9

Secondary school students recognise the value of the PACT programme, but most do not feel that it is making much impact in its current form.

4.3.7 Guidance and counselling

There are three key obstacles that prevent G&C teachers fulfilling their role adequately with respect to HIV/AIDS education in schools. The first is that G&C teachers, particularly in primary schools, have full teaching loads, so that they have relatively little time and energy for guidance and counselling activities. Table 4.15 shows that only 40-45 percent of primary school student questionnaire respondents are aware that G&C services are available, and less than 10 percent of them have actually used these services. At secondary schools, however, around two-thirds of student respondents indicated that they benefited from G&C activities.

Teachers were also asked to indicate what counselling services were offered at their school. Their responses (which are summarised in Table 4.16) indicate that, apart from guidance classes in secondary schools, other types of G&C advice and support are relatively very limited.

The second main problem is that HIV/AIDS education and counselling tends to be marginalised. This is because there are usually more immediate student problems that G&C teachers are called on to deal with. At the survey primary schools, G&C teachers reported that they spend most of their time sorting out discipline problems, in particular those that relate to fighting and bullying.

Table 4.15: Guidance and counselling at survey schools, student responses, March-April 2000

	PRIMARY		JUNIOR SECONDARY		SENIOR SECONDARY	
	Female	Male	Female	Male	Female	Male
G&C offered	38.9	44.1	97.8	92.5	98.2	94.4
G&C services used	10.9	7.5	56.8	50	66.1	59.3

Table 4.16: Teacher responses to question 'What counselling services are provided at your school?' (percentages)

G&C activity	Primary	Junior secondary	Senior secondary
Assembly	8.4	4.5	0.9
Group	5.4	5.3	12.1
Workshop	5.4	3.8	1.9
Individual	4.8	7.5	8.4
Classes	34.1	49.6	66.4
PACT	0	5.3	13.1
General information	16.8	15.8	6.5

Source: School survey

At secondary schools, G&C teachers tend to focus on more 'academic issues'. The following comments of a senior secondary school teacher sums up the situation in many schools:

The curriculum is academically bound and there is no time for diversions into social issues… Testing controls our teachers so it is no use trying to cover things that do not matter.. Schools get good names for high pass rates and not for enhancing education. Guidance and Counselling is not recognised so why spend time on it.

The generally unsupportive environment for teachers in many ways affects teacher attitudes to supporting their students. In short, 'the oppression of teachers begets the oppression of pupils' (PSMDP/MOE, 2000:56).

Other reports and studies have also commented on the general ineffectiveness of G&C with respect to sexual and reproductive health issues. The PSMDP Baseline Survey noted, for example that, in primary schools, 'G&C programmes seem to be more directed at ensuring compliance with accepted levels of pupil behaviour than pupil growth and development' (ibid: 80). The UNDP Human Development Report concludes that 'although there is a G&C curriculum, very little is taught on sexuality matters and H/A' (UNDP, 2000:25). G&C committees are ineffective in most primary schools.

And thirdly, most G&C teachers do not have the specialised knowledge and skills that would allow them to be effective HIV/AIDS counsellors. In common with other teachers, the majority of G&C teachers lack confidence in counselling students, both individually and in groups, on HIV/AIDS and other related SRH issues. Staff development for G&C teachers, especially in primary schools, remains limited. The G&C Division has begun to offer some in-service workshops in order to improve skills in this area. Currently, eight workshops with approximately 40 participants are run each year.

A limited amount of G&C training has been contracted out to NGOs, most notably the Institute for Development Management. The UNFPA sponsored a six-week counselling course in August 1999 for 35 MoE staff, who are expected to cascade this training among staff in each education region. To date, however, very little training has taken place, mainly because these staff is still expected to carry out their normal duties and have not had time to take on additional activities.

4.4 SEXUAL HARASSMENT AND MISCONDUCT

Sexual harassment was addressed in individual interviews and group discussions, and there were specific questions in the student and teacher questionnaires. At the outset, it was important to establish exactly what is meant by sexual harassment. The following standard definition of sexual harassment was provided by the study team - 'any unwelcome contact on breasts, buttocks or genitalia (private parts), ranging from touching to assault and rape, or verbal harassment that referred to sexual characteristics, either between students or between teachers and students'. Most teaching staff tended however to think of sexual harassment as sexual assault or rape. Therefore, the responses of teaching staff should be viewed in light of this extreme view of sexual harassment; it could well be that the milder expressions are ignored as 'normal' or insignificant. The other key issue is, of course, that some love relationships between teachers and students may exist, which do not amount to 'unwelcome contact', but are expressly forbidden by MoE regulations.

4.4.1 Teachers and students

Fewer than 10 percent of teacher questionnaire respondents in all three types of schools agreed with the statement that 'sexual harassment of students by teachers is a serious problem in this school'. However, around a half of all secondary school student focus groups agreed with the statement 'love relationships between students and teachers are common in this school'. Even though 80 percent of primary school teachers are female, one quarter of the primary student focus groups and one-third of the questionnaire respondents also agreed with this statement.

While teachers do not believe that sexual harassment in its worst forms is widespread in schools, it is clear from their comments that love relationships and other 'sexual encounters' between mainly young male teachers and female students are quite common. The following comment from a focus group discussion with the school management team at a senior secondary school is particularly illuminating:

Teachers' sexual harassment directed to students is called harvesting. Teachers are using what they have at their disposal… There are two types of harvesting – 'early harvesting' occurs while pupils are still doing their studies and 'late harvesting' when pupils have finished writing their exams and even after they have left school'

Table 4.17: Statement responses of teachers and students concerning sexual harassment in the survey schools

Sexual harassment of students by teachers is a serious problem in this school
Love relationships between students and teachers are common in this school

	QUESTIONNAIRE		
	Disagree	Not sure	Agree
STUDENTS			
Primary	42	20	33
CJSS	41	30	27
Senior sec	19	49	23
TEACHERS			
Primary	89	5	2
CJSS	79	14	5
Senior sec	52	40	7

Sexual harassment among students is a serious problem in this school

	QUESTIONNAIRE			FOCUS GROUP		
	Disagree	Not sure	Agree	Disagree	Not sure	Agree
TEACHERS						
Primary	85	4	10	9	64	18
CJSS	54	32	13	57	14	29
Senior sec	38	42	16	75	25	0

Sexual harassment among teachers is a serious problem in this school

	QUESTIONNAIRE		
	Disagree	Not sure	Agree
TEACHERS			
Primary	88	7	3
CJSS	71	23	4
Senior sec	53	42	4

Sexual harassment among students has got worse in recent years

	QUESTIONNAIRE			FOCUS GROUP		
	Disagree	Not sure	Agree	Disagree	Not sure	Agree
TEACHERS						
Primary	82	10	7	64	36	0
CJSS	56	36	7	57	43	0
Senior sec	42	51	5	75	25	0

Sexual harassment among teachers has got worse in recent years

	QUESTIONNAIRE		
	Disagree	Not sure	Agree
TEACHERS			
Primary	84	14	2
CJSS	72	23	5
Senior sec	56	40	3

School management deals effectively with sexual harassment by teachers

	QUESTIONNAIRE		
	Disagree	Not sure	Agree
TEACHERS			
Primary	42	28	25
CJSS	20	51	25
Senior sec	13	65	22

School management deals effectively with sexual harassment by students

	QUESTIONNAIRE		
	Disagree	Not sure	Agree
TEACHERS			
Primary	37	25	36
CJSS	14	35	47
Senior sec	8	65	26

There are certain events or times of the year when sexual 'encounters' are likely to occur (for example, graduation parties).

The verbal and written comments of students also suggest that love relationships are relatively common between teachers and students in secondary schools.

'Teachers attract students with money hence they spread HIV.'

'Some teachers have sexual relations with students.'

'HIV/AIDS is easily spread in this school because the girls at times fall in love with teachers, and they are sometimes caught having sex with other big boys.'

4.4.2 Among Students

As discussed earlier, love relationships between students are very common in secondary schools, and are also reported to be quite widespread in the senior primary school standards where children are already well into their teens. Nearly one-third of the CJSS teacher focus groups agreed with the statement that 'sexual harassment among students is a serious problem in this school'. Nearly 20 percent of primary school groups also agreed and another 64 percent were 'not sure'. Very few teachers agreed with the statement that 'sexual harassment among students has got worse in recent years'.

4.4.3 Among Teachers

Sexual harassment among teachers appears to be virtually non-existent.

4.4.4 Management action

The majority of teachers do not believe that school managers deal effectively with sexual harassment by either teachers or students. It is generally accepted though that this is a very difficult issue to deal with and that 'there are no easy solutions'. As one primary school teacher pointed out 'students find it difficult to be open about these anti-social activities because they think they will be tarnishing the image and reputation of that particular teacher'.

CHAPTER 5

IMPACT ON STUDENTS

There are three main groups of students most directly affected by the AIDS pandemic: children who are HIV positive, those who looking after sick parents and other household members, and children whose parents or other primary carers have died.

5.1 CHILDREN LIVING WITH AIDS

5.1.1 The school-age population

Without medical intervention, approximately one-third of infected pregnant women currently pass on the virus to their babies. Consequently, with overall prevalence rates among women of around 35 percent in Botswana, 11-12 percent of infants become infected. It is estimated that 93 percent will have developed clinical AIDS by the age of six, and are unlikely therefore ever to attend school. Thus, approximately 0.8 percent of the primary school intake will be infected (0.07 x 11 percent) and 0.2 percent of primary school students will develop AIDS (see AbT, 2000a). The Rapid Assessment of Orphans identified 37 HIV orphans, 0.1 percent of those surveyed. A high proportion of infected children is also likely to be orphans.

Only one percent of registered orphans in Molepolole was classified as 'sick' in mid 2000. In 10 villages in Kweneng North, however, 7 out of 127 (5.5 percent) registered orphans were listed as being 'sick'. How much of this illness is AIDS-related is not known.

Most teachers at the survey schools were unable to identify any students in their class who were HIV positive and/or were sick with clinical AIDS. There is, however, a fairly high level of concern among all members of the school community about the risk of infection from students living with AIDS. The MoE has not issued any official guidelines for schools concerning students living with AIDS.

5.1.2 Post-secondary students

No attempt was made to collect detailed information concerning the impact of HIV/AIDS on students enrolled at the teacher training colleges and vocational education and training centres (including the Brigades). However, dropout rates at the six colleges of education have not increased during the last three years. The overall dropout rate for all teacher trainees was only 1.2 percent in 1999.

In mid-2000, nearly 3,000 students were being sponsored by GoB to study overseas. Another 12,000 received financial support to attend higher education institutions in Botswana (including 8,000 at the university). The total budget for bursaries is P460 million in 2000/01.

Senior management in the Department of Bursaries and Student Welfare in the MoE is increasingly concerned about the rapid increase in morbidity and mortality among bursary holders, although no information on numbers and trends is available. Repatriation costs for overseas students who become ill are extremely high. It is likely, therefore, that GoB will, in future, require all students who are awarded overseas bursaries to test for HIV. This could, in turn, result in large increases in the numbers of infected students at national higher education institutions.

The Debswana Diamond Company began to test individuals wishing to take up company bursaries in March 2000. Of the 55 successful applicants, three declined to be tested and withdrew, and one person tested positive i.e. 1.9 percent of those tested. Projected AIDS mortality rates for the 15-19 and 20-24 age cohorts are 0.23 percent and 1.34 percent respectively for 1999 (see Abt, 2000).

5.1.3 School attendance

Table 5.1 summarises overall student absenteeism at the survey schools during the first term up to the time of the survey. Given that this was a relatively short period (20-24 days for primary and 35-40 for secondary), it is not surprising to find that very few students had been absent for five days or more.

Table 5.1: Student absenteeism at the survey schools, First term 2000 (percentages)

	NUMBER DAYS ABSENT				Percent ever absent
	1 TO 5	6 TO 10	11 TO 15	16>	
PRIMARY					
Female	17	0	0.5	0.5	18.1
Male	22.3	0	0.6	0.6	23
JUNIOR SECONDARY					
Female	23.7	2.2	0	0.7	26.6
Male	23.1	1.5	0	0.7	25.3
SENIOR SECONDARY					
Female	25	1.8	0	0	26.8
Male	31.5	0	0	0	31.5

Interestingly, absenteeism is higher among male than female students in primary and senior secondary schools and about the same in CJSS. Elsewhere in sub-Saharan Africa, girls tend to have poorer attendance records than boys because of higher household demands for their labour. But, as can be observed in Table 5.2, 'needed at home' was not cited as a reason for being absent by any female respondent in either primary and secondary schools and only 1.4 percent of female students in CJSS.

Only 20-30 percent of teacher questionnaire respondents agreed with the statement that 'student absenteeism is a big problem in this school (see Table 5.3). However, it is noticeable that considerably higher proportions of primary and CJSS teacher focus groups agreed with this statement.

Table 5.2: Reasons for student absenteeism at survey schools, First term 2000 (percentages)

REASON	PRIMARY		JUNIOR SECONDARY		SENIOR SECONDARY	
	Female	Male	Female	Male	Female	Male
Illness of self	12.9	17.4	21.6	16.4	17.9	25.9
Death in the family	3.6	3.7	4.3	6	3.6	3.7
No teacher	1.6	1.9	0.7	0.7	0	0
Sickness in the family	1	1.2	1.4	1.5	0	1.9
Needed at home	0	1.9	1.4	3.7	0	0
Sent home	0.5	1.6	0.7	4.5	0	1.9
Other	1.6	2.5	1.4	1.5	3.6	3.7

No information was available on the number of students who have dropped-out of school through ill health, but the numbers are likely to be very small. While illness is the main reason for student absenteeism, again it is not possible to say how much of this is AIDS-related.

Table 5.3: Student absenteeism is a serious problem in this school

	QUESTIONNAIRE			FOCUS GROUP		
	Disagree	**Not sure**	**Agree**	**Disagree**	**Not sure**	**Agree**
TEACHERS						
Primary	67	2	29	18	18	46
CJSS	62	3	32	43	0	57
Senior sec	66	8	21	50	25	25

5.2 CHILDREN LOOKING AFTER THE SICK

5.2.1 Overall situation

There is a broad consensus that most children in AIDS-affected households in SSA will have to look after sick parents and other relatives and that this will have a major impact on their education. Carr-Hill et al argue, for example, that 'school-going children, especially girls, are seen to be the only alternative care providers in many families' (Carr-Hill et al, 2000: 55). The Rapid Assessment of Orphans also noted that 'in most cases before death, children serve as caregivers to their parents' (p. 21) and that 'where children were providing care for the dying, the situation was found to be worse' (p.11). However, the survey provided no information on the number of children who were affected in this way.

Class teachers interviewed at the survey schools were generally unable to identify more than a handful of children in any one school whose education had been disrupted because they had to look after a sick relative. However, with up to ten percent of households likely to have a sick member in higher prevalence areas of the country, significantly more children than this will have been emotionally traumatised in varying degrees.

5.2.2 The Home-Based Community Care Programme

The overall level of support provided to terminally ill adults has major implications for the welfare of affected children and their attendance and performance at school. By mid- 2000, the Home Based Community Care (HBCC) programme in the Ministry of Health had recruited 3,500 unpaid volunteers who provided support to 7,000 patients. Patients receive an allowance of P216 per month, although there are often long delays in disbursements.

Family Welfare Educators are expected to play a leading role in the HBCC programme. A total of 800 FWEs were employed in early 2000. Currently, only 45 are being trained each year. The level of training and conditions of service for FWEs also have serious shortcomings. In particular, the quality of the student intake is too low (Junior Certificate only), the duration of training is too short, and salaries are very poor with little or nor career progression.

5.2.3 School attendance and educational attainment

Only about one-third of teacher interviewees had any specific comments to make concerning educational and other impacts among students who are caring for sick relatives. Among students, only around 30 per cent of primary school questionnaire and focus group respondents agreed with the statement that 'students who have to look after sick parents often dropout of school'. The corresponding percentages among secondary school respondents are lower still at 10-20 percent (see Table 5.4).

Table 5.4: Students who have to look after sick relatives often drop out of school (percentages)

	QUESTIONNAIRE			FOCUS GROUP		
	Disagree	Not sure	Agree	Disagree	Not sure	Agree
STUDENTS						
Primary	29	19	28	27	42	31
CJSS	46	24	17	58	33	9
Senior sec	43	25	19	50	33	17

With respect to absenteeism, only around one percent of primary and secondary students indicated that they had been absent because of 'sickness in the family' (see Table 5.3). The death of a family member i.e. funerals appears to be a more important cause of absence, with around four percent of students indicating that this had caused them to be absent for at least one day during the current term.

With over half of all children leaving school after CJSS, there is a large pool of un- or under-employed youth that can provide care for the sick in most households. Furthermore, given that primary school students finish school at 1pm, they are available for the remainder of the day to undertake household and other activities

When problems have arisen as a result of students having to look after sick parents and other relatives, most schools have usually requested that another family member

(usually an aunt or grandmother) be given primary responsibility. Most schools indicated that these problems have been satisfactorily resolved.

Senior management of HBCC also indicated that it was unusual for children to take a major role in looking after sick parents and that, to date, school attendance had not therefore been seriously affected. Certainly, smaller children ('little ones') are not usually directly involved. Recent research on the burden of home-based care also shows this to be the case (Ncube et al, 2000).

5.3 ORPHANS

5.3.1 The orphan population

Defining orphanhood: 'Orphans' are defined in a variety of ways, which makes it difficult to establish a precise and comprehensive picture of the current numbers of children who have lost parents. The Ministry of Local Government, which has primary responsibility for supporting orphans and other 'needy children' defines an orphan as 'a child below 18 years who has lost one (single parent) or two (married couple) biological or adopted parents. Married couples also include those people married under customary law. Social orphans are defined as those children who are abandoned or dumped and their parents cannot be traced' (GoB, 1999).

Secondary data: The Ministry of Finance has estimated that there will be 85,000 orphans by the end of 2000. The Ministry of Health puts this figure at 65,000. On the basis of the MoLG definition, 28,906 orphans were registered by social workers in November 1999. Half of these were assessed as being in need of 'care and support'. A second round of registrations was completed in April-May 2000, but the data for the whole country was not yet available at the time of writing. However, this information was collected for the villages in two of the three districts where the survey schools are located. Table 5.5 shows that the most MoLG registered are over five years old.

Table 5.5: Gender, age, and educational status of registered orphans in school survey villages, mid 2000

DISTRICT	Female	Male	AGE			EDUCATIONAL STATUS			
			<5	6 to 10	11 to 17	In primary	CJSS	Senior	Out of school'
NORTH-EAST									
5 villages	43.2	56.8	8.2	34.0	57.8	51.2	26.7	3.4	6.8
KWENENG									
Molepolole	45.2	54.8	10.4	29.3	60.2	69.3	18.1	2.9	9.7
North Kweneng	43.6	56.4	18.8	34.7	46.5	71.3	15.8	1	11.9

Social workers who were interviewed in Kweneng East District reported very large increases in the number of registered orphans between the first and second rounds. As a result, the orphan budget for the district has had to be increased from P2 million to P 7 million.

The AbT demographic study on the impact of HIV/AIDS estimates that between 35,356 and 57,951 children under 15 will have lost their mother to AIDS by 2000 (see AbT, 2000a).

School survey: At the survey schools, 3.7 percent of the primary school students who completed the questionnaire had no parents. The figures for CJSS and senior secondary are slightly lower at 2.9 percent and 2.8 percent respectively. Another 4-5 percent had no mother, and 11-17 percent indicated that their father was deceased (see Table 5.6). If this is representative for all schools, then approximately 34,100 students were maternal orphans in 2000 (24,600 in primary schools, 7,000 in CJSS, and 2,500 in senior secondary).

Table 5.6: Status of parents among students at the survey schools, March-April 2000

School Type	Both alive	Paternal orphan	Maternal Orphan	Double Orphan	Maternal + double
PRIMARY	83.9	11	3.9	3.7	7.6
CJSS	77.4	16.5	3.2	2.9	6.1
SENIOR	75.9	16.7	4.6	2.8	7.4

The incidence of orphans varied very considerably among the survey schools.

Teacher interviewees were asked to identify 'orphans' in their class and to assess their overall needs. The average numbers of orphans per class in the survey primary schools were 2.2 in Kweneng East and 2.3 in North East/ Francistown. This translates to around 6.5-8.0 percent of overall enrolments. The average number of orphans identified by secondary school teachers was much lower - only 0.74 per class.

Orphan-headed households are seen as being particularly vulnerable. Among the survey schools, 9.1 percent of students who have lost one or both parents are living with siblings. Social workers in Kweneng East District estimated that 15-20 percent of registered orphans are living in orphan-headed households. However, it is possible that some of these siblings are adults and there is no serious material deprivation. Information on registered guardians in Kweneng North shows that, in mid-2000, only 22.1 percent were employed (in wage employment or 'farmers'), 39.7 percent were unemployed, and another 38.2 percent were grandparents and other elderly relatives who were not productively employed.

5.3.2 Orphans and schooling: an overview

The AIDS/STD Unit of the Ministry of Health conducted a rapid assessment of the orphan situation in 10 villages and towns across the country during a 52-day period in 1998. A total of almost 4500 children were identified who had lost one or both of their parents. However, given the limited amount of time spent by the survey team in each locality, it is likely that orphans in difficult circumstances were most likely to be identified. It was not, therefore, a representative sample of orphans.

The report describes the situation of orphans as 'alarming and shocking' with children suffering from 'serious emotional stress, stigmatisation, isolation, and further impoverishment' (Ministry of Health, 1998: 11). Nearly one-third were homeless and, 'in all cases', there was a shortage of food. Four percent of orphans were living on their own in orphan-headed households. Nearly 70 percent were living with one or both grandparents.

The Ministry of Local Government in collaboration with other key stakeholders has developed a Short Term Plan of Action for Orphans for the period 2000/01 to 2002/3. The plan states that 'most orphans have no access to basic human needs such as food, clothing, toiletry and clothing….Access to education is also at stake as most caregivers cannot afford the related costs and orphans are over-burdened with domestic chores' (p.11).

Evidence from the school survey and orphan registration data from the districts in which the survey schools are located suggests that the level of orphan deprivation is not as serious as has been suggested by the Rapid Assessment Survey or the STPA. Only a half of the 29,000 orphans who were initially registered in November 1999 were assessed as being in need of some kind of material support. Teacher interviewees at the nine primary schools that were surveyed also indicated that, on average, around one-third to one-half of the orphans who they could identify in their class were having difficulties with their education and were in need of either material and/or emotional support. In their opinion, the remaining orphans were adequately looked after and were coping at school. The following written comment of a Head teacher neatly summarises the orphan situation at most of the survey primary schools: 'Generally performance goes down immediately after the death of a parent. Some remain depressed, but others are fine. It largely depends on the carer'.

Almost one half of secondary school teacher interviewees recognised that some orphans, although by no means all, do have special problems, which can affect their academic performance. This is particularly the case with double orphans. However, it is interesting to note that secondary school students had virtually nothing to say about orphans in their written questionnaire comments.

Many teachers also pointed out that a large proportion of their students (over three-quarters in some rural schools) are left on their own for considerable periods of time while their parents are away working on the 'lands'. Consequently, their de facto living situation is in many ways similar (and sometimes far worse) than children who are orphans. As one deputy Head teacher in Kweneng District pointed out, 'most children in this school live without parents as parents are away on the lands. So orphans are not that much different'. A number of teachers commented that many orphaned children did not appear to miss their parents.

While the overall situation of orphans is not as critical as has been suggested by other surveys and reports, sizeable proportions of orphans at the survey schools do face additional problems with their schooling. This is particularly the case where school populations of orphans are relatively large.

'Many of our pupils have lost both their parents, therefore they are living with their grandparents many of whom find it very difficult for them to support these orphan. At

the end some brilliant pupils end up failing because of the problems they have at home and lack of parental care. Some desert school to work at nearby cattle posts'.

'AIDS affects pupils learning especially among orphans. Almost all classes have a number of orphans ranging from 1-5. These orphans are disturbed emotionally, intellectually, mentally, physically, socially, and psychologically. As we all know, children need parental care, love, advice and the like'.

Generally speaking, it is orphans from the poorest socio-economic backgrounds who appear to have most problems at school. Thus, while there are problems that relate specifically to orphanhood, it is the existence of endemic poverty, particularly in the rural areas, that is largely responsible for many of the difficulties faced by orphans as well as other 'needy children'.

Two other issues were mentioned by social workers. First, children who have been living with parents in towns and other locations are often sent back to the parental home village when one or both parents die. These moves can often be very disruptive, but the new schools to which these orphans transfer are often unaware of their situation. Secondly, late entry to primary school is more prevalent among orphans.

5.3.3 School attendance and educational attainment

Dropouts: The general consensus is that 'AIDS orphans' are more likely to dropout of school. This is mainly because orphanhood exacerbates financial constraints (school fees and other expenditures) and increases the demands for child labour for household and other activities. The results from 20 orphan country studies show that the average difference between enrolment rates for orphans and non-orphans is 19 percentage points (see UNICEF, 2000). In Botswana, the Rapid Assessment found that 30 percent of the orphans identified had permanently dropped out of school. The report states that 'more girls have dropped out of school to give care to other orphans' (p.12), but no percentage breakdown is given.

Again, the results from the school survey reveal a somewhat different picture. School attendance among orphans of school age remains high. In mid-2000, only 6.8 percent of registered orphans in North East District, 9.7 percent in Molepolole, and 11.9 percent in Kweneng North were classified as being 'out of school' (see Table 5.4). In Kweneng East District, where information on the age of registered orphans was also available, 51.4 percent of the out of school orphans were over 15 years old and could, therefore, have already completed seven years of primary education. National cumulative dropout rates for the primary and junior secondary cycles were 9.4 percent and 6.1 percent respectively in 1997 (latest year available). While not all these are permanent dropouts, it would still appear that dropout rates among orphans are not significantly higher than among non-orphan students.

Information was collected from student questionnaire respondents on whether at any time they had stopped attending school, they had ever repeated, and whether they had been absent for at least one day during the current term. It can be observed in Table 5.7 that the ever-dropped out rates are lowest for students who live with their grandparents and highest among those who live with their fathers. Among students who live with their siblings, these rates are somewhat higher than average, but only by 3-10

percentage points. For children who live with other relatives, dropout rates are zero at primary and secondary schools and only slightly above average at CJSS.

Table 5.7: Educational performance by student carers, March-April 2000 (percentages)

	EVER STOPPED ATTENDING			EVER REPEATED			EVER ABSENT CURRENT TERM		
LIVE WITH	Primary	CJSS	Senior sec	Primary	CJSS	Senior sec	Primary	CJSS	Senior sec
Two parents	3.4	3.2	6.5	16.9	7.3	2.2	20.5	25	28.2
Mother only	4.6	2.9	5.9	20.2	5.8	14.7	19.3	18.8	38.2
Father only	0	14.3	100	29.4	42.9	0	11.8	28.6	100
Grandparents	0	0	0	26.3	3.6	11.1	24.6	32.3	22.2
Siblings	3.4	5.9	10	17.2	5.9	0	13.8	52.9	30
Other relations	0	4.8	0	13.3	4.8	0	40	19	50
Other/ns	0.3	0	0	0.3	14.3	0	0	14.3	0
Overall	3.1	3.3	6.4	19.7	7.3	6.4	20.3	25.6	32.7

Turning to the status of the parents, among students who have lost both parents (double orphans), ever-dropped out rates are significantly higher than non-orphans students at primary schools and CJSS, but this is not the case at senior secondary schools (see Tables 5.8).

Among student focus groups, the large majority disagreed with the statement that 'students whose parents die often drop out of school'. The pattern of responses is similar among individual questionnaire respondents, although there are significant minorities in all three schools (but especially primary schools) who do think that there is a problem of orphan drop out.

There are two main reasons for relatively low (permanent) drop out among orphans. Firstly, food rations and other kinds of material support are provided to the most disadvantaged orphans. However, it should be pointed out that, at the time of the school survey, the full package of assistance under the new National Orphan Programme had not yet been made fully available to registered orphans). It is quite likely, therefore, that dropout rates have fallen since mid-2000 when this programme became fully operational. And secondly, there appears to be relatively little overt discrimination of orphans by teaching staff and students (see below).

Repetition: Repetition rates are an important performance indicator. Surprisingly, at the survey schools, repetition rates tend to be lower for students who live with relatives, siblings, and other carers than among students who live with both parents or one parent (see Table 5.7). The main exceptions are above-average repetition rates for primary and senior secondary school students who live with their grandparents. Repetition rates among double orphans at primary school are lower than among students whose parents are both alive, but they are higher at junior and senior secondary schools (see Table 5.8).

Table 5.8: Performance indicators by parent status and type of school, 2000 (percentages)

PARENT STATUS	EVER STOPPED ATTENDING			EVER REPEATED			EVER ABSENT THIS TERM		
	Primary	CJSS	Senior Sec	Primary	CJSS	Senior Sec	Primary	CJSS	Senior Sec
BOTH PARENTS ALIVE									
Live with both parents	2.9	1.8	7.5	17.5	8.3	2.5	21.4	22.9	27.5
Mother only	4.7	5.3	9.1	20	7.9	13.6	21.2	18.4	30.5
Grandparents	0	0	0	28.6	5.6	0	26.2	33.3	20
Siblings	4.8	0	16.7	14.3	0	0	14.3	44.4	33.3
PATERNAL ORPHANS	0	2.2	5.6	15.3	6.7	11.1	12.8	24.4	33.3
MATERNAL ORPHANS	0	16.7	0	35.7	8.3	0	21.4	41.7	60
DOUBLE ORPHANS	15.4	12.5	0	15.4	12.5	33.3	0	12.5	33.3

Absenteeism: It is difficult to calculate student absenteeism rates over time from class registers mainly because complete sets of registers are rarely retained. However, student questionnaire respondents were asked if they had ever been absent this term. Table 5.8 shows that absenteeism is only slightly higher among primary school and CJSS students who live with grandparents, and is much lower among the same group at senior secondary level. Among other groups, levels of absenteeism appear to be appreciably higher among 'siblings' at CJSS and 'other relatives' at primary and senior secondary schools. Perhaps the most surprising finding is that there was no absenteeism whatsoever among double orphans at the primary survey schools and this group had the lowest rate of absenteeism at CJSS. More research is needed on why this is the case, but the following factors are likely to be important.

- Household demand for child labour appears to be generally low and/or can be met during out-of-school hours.

- Orphans have particularly strong material and emotional/ psychological incentives to attend school. Although the school environment is not particularly child-friendly (see Chapter 3), attending school is still an important part of leading a 'normal' life. In other words, orphans want to be 'like everyone else', especially in a country like Botswana where most children attend primary and junior secondary school. The provision of school meals (one in primary and two in secondary schools) was also frequently mentioned as a major incentive among disadvantaged orphans.

- The home environment for orphans is likely to be much less attractive than school, with little or nothing to do during the day and/or relatively inattentive carers.

Overall school performance: In overall terms, teachers at the primary schools estimated that orphans whose academic performance had been adversely affected accounted for 2.0-2.5 percent of total student enrolments. In secondary schools, this figure is lower (around 1 percent). However, it was not possible to compare the examination performance of orphans and non-orphans at both the primary and secondary survey schools.

5.3.4 Orphans in difficult circumstances

Teaching staff and students at all the survey schools identified a range of problems that affect orphans in difficult circumstances. The most commonly identified are:

- Behavioural problems that affect relationships with teachers and students (disruptive/ aggressive, withdrawn, crying in class): 'Orphans in this school are de-motivated. They are not free, they don't mix, and if you joke with them they fight. They react aggressively to others sometimes-as a defence mechanism. If we sing a burial song in class, some cry'.

- Poor concentration (including falling asleep in class) often aggravated by hunger and/or tiredness.

- Poorly dressed/lack of school uniform.

- At secondary schools, problems with homework; in unsupportive home environments, orphans find it difficult to complete homework assignments on time and to the required standard.

- Physical and/or sexual abuse by adults living in the carer's household.

- General isolation at school and/or the community at large. 'Pupils whose parents are affected or have died through the disease seem not to be part of the school community, though teachers try by all means to bring them close, others end up leaving the school.'

5.4 DISCRIMINATION

Widespread concerns have been expressed about high levels of stigmatisation and discrimination of 'AIDS orphans' and other children affected by HIV/AIDS in schools in sub-Saharan Africa. However, little of this discussion is supported by empirical evidence. In Botswana, also, the Short Term Plan of Action for Orphans notes that 'orphans are continually stigmatised, marginalised and sometimes isolated and rejected not only by other students, but also teachers' (p.31). Similarly, the UNDP Situational Analysis of HIV/AIDS in Kweneng East concludes that 'current strategies do not adequately address the issue of stigma being passed onto children whose parents have died of AIDS' (UNDP: 2000, xii).

5.4.1 School survey

Given the sensitivities surrounding HIV/AIDS, it is very difficult to ascertain the extent and nature of discrimination against students affected by HIV/AIDS in schools. One would normally talk directly to those who are the possible targets of systematic discrimination but, for the reasons discussed earlier, this was not possible. However, the school survey found no evidence of widespread and serious discrimination in either primary or secondary schools. The responses of students and teachers to statements in both questionnaires and focus groups indicate that there is very little discrimination by teachers and that, with the possible exception of some primary schools, this is also the case among the student body (see Table 5.10). It is rather the lack of positive support

for affected children, of a failure to recognise and respond to the special educational needs of these children in a concerted manner at the school level, that is the main concern. At secondary schools in particular, students affected by AIDS are relatively invisible. Where discrimination has occurred, though, most teachers do not think that school managers have taken firm enough measures to deal with this (see Table 5.9).

Table 5.9: Statements concerning discrimination against students affected by AIDS (percentages)

Students whose family members are HIV positive are discriminated against by teachers

				FOCUS GROUP		
	Disagree	Not sure	Agree	Disagree	Not sure	
STUDENTS						
Primary	48	27	20			
CJSS	59	25	11	58	33	9
Senior sec	70	21	10	50	33	17
TEACHERS						
Primary	81	12	5			
CJSS	64	33	2			
Senior sec	47	50	0			

Students whose family members are HIV positive are discriminated against by other students

	QUESTIONNAIRE			FOCUS GROUP		
	Disagree	Not sure	Agree	Disagree	Not sure	Agree
STUDENTS						
Primary	36	23	39			
CJSS	53	25	21	67	8	25
Senior sec	57	27	16	17	33	50
TEACHERS						
Primary	71	22	6	64	0	36
CJSS	35	55	9	43	57	0
Senior sec	29	66	2	0	100	0

School management has taken firm measures to counter discrimination against teachers and students who have AIDS

	QUESTIONNAIRE		
	Disagree	Not sure	Agree
TEACHERS			
Primary	54	33	10
CJSS	25	59	13
Senior sec	18	73	2

The written comments of teachers and secondary school students also show virtually none of the overtly discriminatory and hostile views on how affected students should be treated that have been found in other surveys. Only one teacher stated that these students should be isolated and sent to special schools.

Serious discrimination at school by managers, teachers and/or students would deter orphans and other affected children from attending school. The fact that drop out, repetition and absenteeism are not significantly higher among orphans is further evidence that the discrimination is not a major problem in the large majority of schools in Botswana.

5.4.2 Other evidence

Social workers have regular contacts with schools. Those interviewed in the school survey districts indicated that orphans are not seriously discriminated by teachers and students. Teachers co-operated fully in the registration of orphans. The main concerns of social workers centre on the lack of counselling and overall emotional support by school staff.

Senior MoE management has also instructed schools not to discriminate against orphans and other students affected by AIDS and to provide as much support as possible. The Director of Primary Education sent a circular to all head teachers in October 1999, which stated, *inter alia,* that managers and teachers 'must never return home children that come to school without uniforms'.

5.5 GOVERNMENT SUPPORT

5.5.1 The National Orphan Programme

Up until 1999, government support for orphans was 'ad hoc and uncoordinated' (MoLG, 1999: 20). The only assistance available was for orphans and their carers who were eligible for the 'destitute' allowance. Data on the number of orphans who received this allowance is not available, but the uptake was generally low. The high level of stigma attached to being classified as 'destitute' deterred many orphan carers from seeking support.

The Rapid Assessment of Orphans alerted government to the serious situation facing many orphans. In particular, traditional safety nets are no longer able to cope with the rapidly growing population of orphans. In response to this crisis, the National Orphan Programme was established in April 1999. By April 2000 a Short Term Plan of Action for Orphans had been developed and was ready for implementation. The Plan covers the period 2000/01-2002/03 and has a total budget of P70.7 million. A total of 83 Child Welfare Officers are to be appointed who will have overall responsibility for the programme at the district level. All major stakeholders have participated in the formulation of government policy on orphans. However, MoE involvement in the MoLG Committee that has been responsible for developing new policies for orphans has been relatively limited.

As part of the STPA, orphans who are in need are entitled to a comprehensive package of support, which covers all their material basic needs. This includes food rations, school

uniforms and other clothing, transport expenses to school, and accommodation. The monthly food ration is provided in kind and is intended to meet all key nutritional requirements. It was costed at P216 in mid-2000 and is supposed to provide for up to three orphans living in a single household. For example, a group of seven orphans in one household are eligible for three food rations.

Orphans can only be registered for support with the consent of their carers. This raises concerns about the rights of the child, especially in situations where care is seriously inadequate. Schools have played an important role in providing social workers with information on orphans.

Orphanages and fostering: Strong cultural prohibitions in Botswana strongly discourage the separation of orphans from relatives. Consequently, orphanages are not generally considered to be an acceptable form of institutional care. This is even the case when orphans are living on their own, having been effectively abandoned by their relatives. Again, this raises major concerns about the rights of the child vis-a-vis adult carers. Given the strong opposition to orphanages, demand for places at the few centres that are in operation is very limited. For example, in mid-2000, only 60 of the 150 places at the SOS Children's Village in Francistown were occupied. Fostering in the community is seen as the preferred option when carers (the majority of whom are elderly) are unable to cope. New Guidelines on Fostering are to be issued by the MoLG in the second half of 2000.

5.5.2 Strengths and Weaknesses of the National Orphan Programme

Programme conception: There are some concerns that the STPA is too narrowly conceived, since it focuses mainly on the provision of food rations and meeting other immediate material needs. As one interviewee put it, 'supporting orphans requires more than just providing food baskets…Other kinds of assistance are required that address the emotional and other needs of these children'. Orphan-headed households are a particularly vulnerable group.

Orphan registration: The first round of orphan registrations was problematic. The use of the term 'AIDS orphans' deterred many relatives and other carers from coming forward. This was rectified in the second registration and, given the current level of benefit entitlements, social workers are generally confident that most needy orphans have now been registered.

Material support: The STPA budget is not large enough to cover all the needs of registered orphans: Only P30.1 million is available for direct 'support activities'. This has to meet the basic needs of approximately 14,500 registered orphans for two years, an average of only P1037 for each orphan per annum. The total cost of a single food ration is P2592 per annum. The food ration is itself insufficient for households that have no other sources of income.

Programme implementation and monitoring: Staff shortages are delaying programme implementation in some districts. Social workers and family welfare educators are seriously over-burdened and cannot begin, therefore, to provide adequate support for

orphans in difficult circumstances. Monitoring is also generally weak, again mainly because of staff constraints.

There is also growing concern about how orphan benefits are being utilised by carers. The overall monetary value of food rations is relatively high, especially for the poorest households. Some carers are reported to be selling food rations in order to buy alcohol. As a social worker based in Kweneng District pointed out 'relatives are now fighting for control over orphans in order to access the resources that are now being made available'.

Inter-sectoral co-ordination: Split jurisdiction between the Ministries of Health and Local Government makes it difficult to co-ordinate a national programme of this kind. In most districts, 'family welfare educators and social workers do not work as a team.'

Child protection: Existing child protection laws and policies are fragmented and need to be up-dated. Social workers do not have the necessary powers to intervene decisively. Very few abuse cases ever reach court.

Other needy children: There is a danger that too much emphasis may be given to the needs of orphans and that other needy children from poor households will be not be given appropriate support. These children are covered under the 'destitute' policy, which has lower benefit levels.

The HBCC programme: Staff shortages continue to undermine the effectiveness of this programme. There is also an urgent need for more hospices and 'half way houses' for those individuals who do not receive effective care at home.

5.6 SCHOOL-LEVEL SUPPORT

The Rapid Assessment of Orphans found that schools were generally unsupportive of orphans and other children affected by HIV/AIDS. The report states that orphans were 'constantly being sent home for lack of basic items such as uniform, shoes or feeding money'. During the previous 12 months, 19 percent of orphans had been sent home. School management did not usually bother to inform the Social and Community Development Department (S&CD) about children in need or request assistance on their behalf. (p.20). Teachers felt inadequate in handling AIDS-related counselling (p.19). However, despite these criticisms, only 113 of the orphans (2.5 percent of the total) were identified as being out of school.

5.6.1 The School Survey

None of the survey schools have addressed the specific needs of orphans and other affected children in a systematic manner. This is mainly because most school managers and teachers believe that social workers employed by S&CD have the primary responsibility for assisting orphans. Consequently, they see the school's main role as referring orphans who are having difficulties to the appropriate social workers. School managers also pointed to the lack of an explicit MoE policy on orphans and the general absence of any overall direction from management in MoE head and regional offices in this area.

Many teaching staff, especially at secondary schools, do not feel, therefore, that it is appropriate for schools to play a more interventionist supportive role. Typical comments by school managers were as follows: 'We (the school) can't just get into the family'; 'It is the government's responsibility to help orphans. Schools can do little in the way of material support'; 'It is not our business. The school alone can offer very little. We identify them and take them to the social workers'. This reluctance to 'get more involved' was compounded in some schools by the widespread perception that many guardians as well as orphans themselves do not want to be identified and may actively resent attempts by schools to provide additional support. Consequently, the 'guardians of orphans frequently rebuff the charitable impulses of teachers'. When outside assistance is required, carers generally turn to social workers rather than teachers. Thus, even more proactive teaching staff often feel deterred by carer resistance and resentment.

The school survey clearly reveals the absence of a strong supportive environment for orphans in most schools. In particular, only small minorities of CJSS and senior secondary school students agreed with the statement that 'orphans receive a lot of help from this school'. Even in primary schools where (predominantly female) teachers are generally more aware of student needs and problems, only 42 percent of student respondents agreed with this statement (see Table 5.11). A key reason for the lack of help is that many teachers do not believe that orphans as a whole have special needs. Only half of the senior secondary teacher focus group respondents agreed with the statement that 'students who have lost one or both parents have more problems than other students'. And even among teachers of younger children at primary schools and CJSS, one-third of respondents disagreed with this statement.

Table 5.11: Student and teacher responses to orphan statements (percentages)

Students who have lost one or both parents have more problems than other students

	QUESTIONNAIRE			FOCUS GROUP		
	Disagree	Not sure	Agree	Disagree	Not sure	Agree
TEACHERS						
Primary	15	18	67	18	9	64
CJSS	4	23	73	0	29	71
Senior sec	5	33	62	0	50	50

Students whose parents die often drop out of school

	QUESTIONNAIRE			FOCUS GROUP		
	Disagree	Not sure	Agree	Disagree	Not sure	Agree
STUDENTS						
Primary	40	18	37	50	42	8
CJSS	50	22	25	75	25	0
Senior sec	70	6	23	67	17	17

Orphans receive a lot of help from this school

QUESTIONNAIRE	FOCUS GROUP

	Disagree	Not sure	Agree	Disagree	Not sure	Agree
STUDENTS				**TEACHERS**		
Primary	34	18	42			
CJSS	32	43	23	14	29	43
Senior sec	38	40	20	0	0	100

Identification: None of the survey schools had a good overall picture of orphans in the school and their particular needs. As noted above, a key issue is that orphans themselves often do not want to be identified nor do their guardians. As a result, teachers are frequently unaware who among their students are orphans and are clearly not, therefore, in a position to support them. This is particularly the case in secondary school where subject teachers only teach students. The following statements from a Head teacher of a senior secondary school and teachers and students at a CJSS provide a good summary of the situation with respect to the identification of orphans in most secondary schools:

'I think we have a few (orphans), but I can't say who is an orphan. They are sometimes brought to me by the Guidance and Counselling teachers or parents We only get to know that pupils are orphans if they get into trouble…The guidance teacher may know who is orphaned but the rest of the teachers don't know anything about orphans. The orphaned children at this school don't want to be identified. Their guardians are also secretive' (Head teacher, Senior Secondary School)

'There are orphans in this school, but the teachers don't quite know who is an orphan. We only find out if they get into trouble. The guidance teacher is responsible for finding out what is wrong with children when there are problems. But some pupils are brave enough to let us know. They approach members of the Guidance Committee. The school has referred some orphans to the social workers… The school does not keep a record of who is an orphan. Guardians would not like it if we did. …Teachers at secondary schools don't have time to offer support to pupils with problems. Pupils are taken for granted. Out curricula is too crowded to allow us to address student problems' (Junior secondary teacher focus group).

'We sometimes caution teachers on problems faced by some pupils but they don't seem to care…Teachers behave like they have never heard of family problems. When you are depressed they think you are thinking about boys. Teachers don't have time for us. Most don't want to know our problems. They are suspicious of us ' (Junior secondary female student focus group).

The large divergences between teacher estimates of the number of orphans and the actual numbers of orphans in a particular school[4] are indicative of the limited knowledge that most teachers have about the home situation of their students. Many teachers are unable to recognise when students are stressed and what kinds of support are required. As one primary school teacher stated, 'we never know until an incident occurs which requires digging'. Around 20 percent of the teachers interviewed at the survey schools

[4] Estimates of the overall number can be derived from the information on parental status in the student questionnaires

had no idea who were orphans in their class and some asked their students to 'put up your hand if you are an orphan'. Although S&CD now has fairly comprehensive information on orphans, none of the survey schools had requested relevant information nor, conversely, had any of it been furnished to schools by S&CD.

Referral follow-up: Although all the survey schools have referred orphans and other needy children to social workers, schools rarely follow-up these referrals in order to see what has been done.

Targeted support: It is generally left to individual teachers to identify and support orphans as they see fit. Consequently, the support given to orphans in difficult circumstances is very uneven. In some schools, only a small proportion of orphans with problems had been referred to S&CD. Social workers themselves are extremely busy and are unable, therefore, to spend much time in schools. While teaching staff regard social workers as being mainly responsible for orphans, S&CD support is limited to orphan registration, which focuses on assessing the material needs of orphans. In other words, social workers are not in a position to address the other emotional and psychological problems of orphans, which frequently affect school performance. Appropriate counselling support for orphans at the survey schools is also limited.

Some secondary schools with boarding facilities reported that they sometimes provide boarding places for orphans and other affected students.

Responsibility within schools: In secondary schools, the majority of teachers believe that the guidance and counselling teacher(s) have the main responsibility for assisting orphans. Thus, there is a tendency for teachers to 'pass the buck' and externalise the problem even within the school itself.

Links with carers and the wider community: Teaching staff reported that orphan guardians and other carers often know very little about the school their wards are attending. 'Some grandparents don't even know the name of the child's teacher'. The linkage between schools and social workers is also generally weak.

CHAPTER 6

THE IMPACT ON TEACHING AND OTHER STAFF

The AIDS epidemic in Botswana is widely expected to have a highly adverse impact on the overall staffing situation throughout the MoE. All categories of personnel will be affected - school managers, teachers, and support staff. Much higher morbidity and mortality, especially among experienced and well-qualified teaching staff, will pose a major organisational challenge. More generally, unless appropriate measures are taken, the morale, motivation, and overall performance of all teachers and support personnel could be seriously undermined.

The following discussion first briefly describes the current staffing situation in the MoE, particularly with respect to teachers. The second section then discusses the levels and patterns of morbidity and mortality among teaching and support staff. The third section focuses on 'AIDS in the workplace' issues.

6.1 STAFFING OVERVIEW

With a total establishment of 20,246 permanent and pensionable staff in 2000/01, the MoE accounts for 43.2 percent of central government employment. Teachers comprise over one quarter of all 'skilled employment' in the country. Thus, both in absolute and relative terms, MoE personnel are a critically important human resource in Botswana.

There are two main categories of MoE staff: teachers, teacher trainers, and school managers who are formally employed by the Department of Teacher Services Management (TSM); and MoE management and support staff who, as central government employees, are employed by the Department of Public Services Management (DPSM).

6.1.1 School managers and teachers

Total employment: TSM employed 19,797 teaching staff in primary and secondary schools in August 2000 (see Table 6.1). Nearly 60 percent of these are deployed in 714 primary schools. The remaining staff worked in 236 community junior secondary schools (32.1 percent), and 32 senior secondary schools (9.9 percent).

The breakdown between the main employment categories is as follows: permanent and pensionable (including probationers) 16,163 (81.6 percent), foreign contract 1,180 (6.0 percent), and temporary (untrained) teachers 2,356 (11.9 percent). There were 991 head teachers and 913 deputy head teachers (9.6 percent). Another 500 managers and lecturers are employed at the four primary and two secondary teacher training colleges.

Table 6.1: Teaching staff by employment status, gender and type of school, August 2000

STAFF CATEGORY	PRIMARY			JUNIOR SECONDARY			SENIOR SECONDARY			OVERALL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Permanent & pensionable	7893	1522	9415	1755	1627	3382	427	435	862	10075	3584	13659
P&P probation	652	286	938	656	594	1250	141	175	316	1449	1055	2504
Temporary	812	311	1123	556	444	1000	107	126	233	1475	881	2356
Foreign contract	9	3	12	191	461	652	148	368	516	348	832	1180
Other	0	0	0	40	30	70	6	22	28	46	52	98
TOTALS	**9366**	**2122**	**11488**	**3198**	**3156**	**6354**	**829**	**1126**	**1955**	**13393**	**6404**	**19797**
Percentage breakdowns												
Permanent & pensionable	84.3	71.7	82	54.9	51.6	53.2	51.5	38.6	44.1	75.2	56	69
P&P probation	7	13.5	8.2	20.5	18.8	19.7	17	15.5	16.2	10.8	16.5	12.6
Temporary	8.7	14.7	9.8	17.4	14	15.7	12.9	11.2	11.9	11	13.8	11.9
Foreign contract	0.1	0.1	0.1	6	14.6	10.3	17.8	32.7	26.4	2.6	13	6
Other	0	0	0	1.3	1	1.1	0.7	2	1.4	0.3	0.8	0.5

Gender and marital status: Over two-thirds of all teaching staff are women (primary 81.5 percent, CJSS 50.3 percent, and senior secondary 42.4 percent). Well over two-thirds of teaching staff are single (see Table 6.2).

Table 6.2: Marital status of teaching staff by gender and type of school (percentages)

Marital status	PRIMARY		CJSS		SENIOR SECONDARY	
	Single	Married	Single	Married	Single	Married
Female	67	33	72.4	27.6	64.7	35.3
Male	77.9	22.1	77.8	22.2	64.9	35.1
All	69	31	75.1	24.9	64.8	35.2

Regional location: There are six and four education regions for primary and secondary education respectively. Table 6.3 shows the deployment of permanent and pensionable (P&P) teaching staff by region. Nearly two-thirds of them work in two regions – Central (including Central North and Central South) and South Central.

Academic and professional qualification profiles: There are very marked differences in the academic and qualification profiles of teachers in primary and secondary schools. Over 80 percent of primary school teaching staff have only Junior Certificate or the Primary School Leaving Examination whereas nearly all junior secondary school staff have '0' levels and over 80 percent of senior secondary teachers are university graduates. In terms of professional qualifications, nearly 20 percent of primary school teachers have no training and 63 percent only have the two-year Primary Teaching

Certificate, which has now been phased out at the Colleges of Education. In marked contrast, secondary school teachers are much better qualified; 81 percent of junior secondary teachers have the full three year teaching diploma, and 83 percent of senior secondary graduates have a B.Ed. or the post-graduate diploma in education (see Table 6.4).

Table 6.3: Location of teachers by education region, August 2000

REGION	PRIMARY		CJSS		SENIOR SECONDARY		ALL			
	Female	Male	Female	Male	Female	Male	Female	Male	Total	%
Central			558	561	105	145	663	706	1369	10%
Central North	1330	255					1330	255	1585	11%
Central South	1646	312					1646	312	1958	14%
North	817	165	315	332	78	112	1210	609	1819	13%
South	1376	323	338	401	94	91	1808	815	2623	19%
South Central	2301	334	564	381	165	111	3030	726	3756	27%
West	645	226					645	226	871	6%
TOTALS	8115	1615	1775	1675	442	459	10332	3649	13981	100%

Table 6.4: Professional qualification profiles of teachers at survey schools, First term 2000 (percentages)

	None	PTC	Diploma	B.Ed/PGDE	Other/ns
Primary	17.4	62.9	12	1.2	6.6
Junior secondary	0	0	81.2	15	3.8
Senior secondary	0	0	17	83	0

Experience profiles: The teaching force in Botswana is relatively inexperienced. This is particularly the case at junior secondary schools where, as a result of very rapid expansion in enrolments since the mid-1990s, one-half of teachers have less than five years of work experience (see Table 6.5).

Table 6.5: Experience profiles of teachers at survey schools, First term 2000 (percentages)

YEARS TEACHING	<1	1 - 2.99	3 - 4.99	5 - 9.99	10-14.99	15-19.99	20>
Primary	4.8	14.4	10.8	27	23.4	10.2	9
Junior secondary	12.1	18.9	18.2	30.2	9.8	5.4	3.9
Senior secondary	8.3	13.1	12.9	26.1	17.8	13.1	9.2

The youthfulness of teachers coupled with quite high rates of transfers also means that Only 20 percent of junior secondary teachers have been at their current school for more than five years. The corresponding figures for primary and senior secondary schools are somewhat higher - 34.3 percent and 32 percent respectively (see Table 6.6).

Table 6.6: Number of years teachers have been at current school (percentages)

YEARS TEACHING	<1	1 - 2.99	3 - 4.99	5 - 9.99	10-14.99	15-19.99	20>
Primary	12.6	33.6	19.2	24	7.8	2.4	0
Junior secondary	25.9	32.4	22	16.7	2.4	0	0
Senior secondary	17.7	27	21.3	27	3.7	1.8	0.9

6.1.2 MoE support staff

In 2000/01, there were another 1766 established (permanent and pensionable) posts for MoE staff who are employed by DPSM. The breakdown of these posts as follows: super scale 55, general administration 737, professional 383, technical 39, technical trainers 333, and secretarial 216. Almost all of these posts were filled in mid 2000. The MoE also employs another 2325 'industrial class' workers, making a total of 4080 support staff.

6.2 STAFF ATTRITION

6.2.1 Teacher mortality rates

Data sources: Information on MoE teacher mortality can be extracted from the Infinium Data base, which is currently being developed by outside consultants. However, mortality data is only reliable from May 1999. Delays are also reported in submitting information, which means that caution has to be exercised with respect to mortality data for the latter half of 2000. Since 1998, the Annual Statistical Return for schools has also requested information on teacher deaths.

Data on deaths among other MoE staff are recorded separately as part of the Infinium human resource date base for DPSM employees. However, comprehensive and accurate staffing data for MoE staff is only available from the beginning of 1998. All MoE departments were also requested to provide information on mortality among officers and industrial class employees since 1995. All complied with this request, except the Departments of Non-Formal Education and Vocational Education and Training. Mortality data for other types of workers was collected from a variety of other sources, including the Central Statistical Office, DPSM, the university, major employers (most notably Debswana), and the two largest medical aid societies (BPOMAS and BOMAID). Unfortunately, no reliable data exists on total deaths for the country as a whole.

Employment status, qualification, and gender: Table 6.7 shows mortality rates for all the three main employment categories disaggregated by type of school and gender for the period May 1999-April 2000. Not surprisingly, mortality rates are much lower among temporary teachers who have only one-year employment contracts. They are, however, higher among expatriate teachers (nearly all of whom are employed in secondary schools). This is despite the fact that foreign contract teachers are tested for HIV prior to their appointment.

Table 6.7: Mortality rates by employment status of teaching staff, May 1999-April 2000 (deaths/000)

	PRIMARY		CJSS		SENIOR SECONDARY	
	Female	Male	Female	Male	Female	Male
Permanent and pensionable	7.6	12.1	2.1	3.6	1.8	2.5
Temporary	2.4	0	0	0	0	2.5
Expatriate	0	0	4.4	6	0	7.2

Among permanent and pensionable employees, mortality rates are considerably higher for male teachers employed at all three types of school. The overall mortality rate among primary school teaching staff is 3-4 times higher than the corresponding rates at CJSS and senior secondary schools. Just why mortality should be so much higher among primary school teachers is not clear, but location and level of education are likely to be key factors. The Infinium human resource data base cannot, as yet, extract information on the qualifications of teaching staff. However, as noted earlier, primary school teachers are poorly educated and trained compared with their colleagues in secondary schools.

Between May 1999 and April 2000, two teacher trainers died (nationals only), 0.6 percent of the total employed at the six Colleges of Education.

Cause of death: The Annual Statistical Return requests information on cause of death. Among a five percent random sample of primary schools, one half of deaths in 1999 were due to illness (both 'short' and 'long') and the other half were 'accidents'. However, among a much larger 15 percent random sample of secondary schools, the share of deaths attributed to illness was much higher - 87.5 percent for junior secondary and 80 percent for senior secondary.

Age: Age-specific mortality rates by gender and type of school are presented in Table 6.8. As expected, mortality rates are highest in the 26-40 age-range for female teaching staff and 26-45 among males. Among female teaching staff, mortality peaks in the 31-35-age cohort whereas male mortality is highest between 41-45.

Marital status: Mortality rates by marital status are presented in Table 6.9. Information on age of marriage is not available, but married teachers are generally older than their single colleagues. Whereas mortality is generally much higher among married male teachers compared with single male teachers, the reverse is true among female teachers. Again, there are very large mortality differentials between school type. At one extreme, no married female senior secondary school teachers died during this 12-month period whereas the mortality rate among male married primary school teachers was very high at 1.7 percent.

Gender differences in mortality rates are relatively small among single staff, although there is no consistent pattern. They are slightly higher among single female primary teachers, but lower among single female secondary teachers. Both female and male single primary school teachers appear to be particularly high risk groups, and should therefore be targeted as part of a systematic and concerted AIDS awareness campaign in the education sector.

Table 6.8: Deaths and mortality rates for all permanent and pensionable teaching staff, May 1999-April 2000 (deaths/000)

PRIMARY

Age Cohort	FEMALE			MALE		
	May-Oct 99	Nov 99-April00	May99-April00	May-Oct 99	Nov 99-April00	May99-April00
18-25	16.8	0	8.4	0	0	0
26-30	10.4	6.6	8.5	13.6	4.6	9.1
31-35	14	8	11	9.6	9.6	9.6
36-40	7	2.4	4.7	6.8	13.6	10.2
41-45	3	2.6	2.8	35.2	35.2	35.2
46-50	0	2.6	1.3	26.4	0	13.2
51-55	0	5.2	2.6	16.4	32.8	24.6
56-60	8.6	0	4.3	0	0	0
61-65	0	22.2	11.1	0	0	0
OVERALL	10	5.2	7.6	13.2	11	12.1

JUNIOR SECONDARY

Age Cohort	FEMALE			MALE		
	May-Oct 99	Nov 99-April00	May99-April00	May-Oct 99	Nov 99-April00	May99-April00
18-25	0	2.7	2.7	4	0	2
26-30	10.9	1.8	6.4	2.1	3.2	5.3
31-35	0	4.4	2.2	1.6	7.9	4.8
36-40	0	0	0	4.6	4.6	4.6
41-45	0	0	0	0	0	0
46-50	0	0	0	27.8	0	13.9
51-55	0	0	0	0	0	0
56-60	0	0	0	0	200	100
61-65	0	0	0	0	0	0
OVERALL	1.7	2.5	2.1	2.7	4.5	3.6

SENIOR SECONDARY

Age Cohort	FEMALE			MALE		
	May-Oct 99	Nov 99-April00	May99-April00	May-Oct 99	Nov 99-April00	May99-April00
18-25	0	0	0	0	0	0
26-30	0	0	0	10.5	0	10.3
31-35	5.2	0	2.8	0	0	0
36-40	0	11.1	5.6	0	9.8	4.9
41-45	0	0	0	0	0	0
46-50	0	0	0	0	0	0
51-55	0	0	0	0	0	0
56-60	0	0	0	0	0	0
61-65	0	0	0	0	0	0
OVERALL	1.8	1.8	1.8	3.3	1.6	2.5

Table 6.9: Mortality rates by marital status and type of school, May 1999-April 2000 (deaths/'000)

	SINGLE		MARRIED	
		Male		Male
Primary	6.7	8.4	4.8	16.9
CJSS	3.8	1.1	4	4.2
Senior sec	3.6	2.6	0	2.2

Ideally, marital mortality rates by age cohort should be compared, but the numbers are too small for it to be possible to undertake a robust statistical analysis.

Management position: Mortality rates among male primary and junior secondary head teachers is higher than among male teaching staff taken as a whole (see Table 6.10). On the other hand, it is much lower among female primary and junior secondary school heads. No head or deputy head at the 29 senior secondary schools died during this period.

Table 6.10: Mortality rates among head teachers and deputy head teachers, mid 2000 (deaths/000)

	HEADTEACHERS		DEPUTY HEADS	
	Female	Male	Female	Male
Primary	2.6	15.5	3.9	12.9
Junior secondary	0	11.9	0	0
Senior secondary	0	0	0	0

Table 6.11: Teacher mortality rates by education region, May 1999-April 2000 (deaths/000)

REGION	PRIMARY		JUNIOR SECONDARY			
	Female		Female	Male	Female	Male
Central			5.2	9.3	0	8.8
Central North	4.9	9.8				
Central South	10.1	8.8				
North	7.7	27.3	6.5	10.1	0	0
South Central	3.8	3	2.7	2	10.4	7.2
South	8.5	2.6	2.5	5.1	0	0
West	6.7	10.3				

Location: There are sizeable and statistically significant differences in mortality rates between the education regions into which the country is divided. Male mortality is relatively high in the North Region, particularly among primary school teachers (see Table 6.11). This is probably due to two main factors – HIV prevalence is highest in this part of the country and young teachers tend to be deployed to the remotest schools, of

which there are a relatively large number in the North Region. Mortality is lowest in the South Central Region (with the exception of senior secondary schools).

6.2.2 MoE staff

Table 6.12 shows mortality rates for permanent and pensionable and industrial class staff employed by the MoE during the period May 1999 to April 2000. The very large differences in mortality rates between the five main grades are striking (see below).

Table 6.12: Mortality rates of MoE staff, 199/2000 (deaths/000)

MINISTRY OF EDUCATION (DPSM STAFF)				
	INDUSTRIAL		PERMANENT	
GRADE		Male	Female	Male
A	11.6	18	13.1	28.2
B	12.1	11.3	9.5	20.8
C	0	0	7.3	11
D			0	0
E			0	0

Source: Infinium database

6.2.3 Comparative prevalence and mortality rates

It is commonly asserted that HIV prevalence in SSA countries is positively correlated with socio-economic status. 'Many studies indicate that people with higher social status and income may be at above risk of HIV infection as they tend to have more opportunities for high risk sexual behaviour' (AbT, 2000: 75). In Zambia, prevalence rates among higher educated groups are reported to be 40 percent higher than the general population (see Sichone and Haworth, 1996).

Teachers are also widely regarded as being a higher risk group in most SSA countries because they tend to be quite young, mobile, and generally better off than the rest of the population. As a result, rates of HIV prevalence and AIDS-related morbidity and mortality among teachers are generally believed to be considerably higher than for the sexually active adult population as a whole. For example, in neighbouring Zambia teacher mortality is reported to be more than 70 percent higher than general adult mortality' (see Goliber, 1999). There is however mounting evidence that, while HIV prevalence tends to be relatively high among higher income groups during the initial stages of the epidemic, it falls thereafter.[5] This is because 'as knowledge of how to avoid HIV becomes more available, people with more education and money are in a better position to learn about it and avoid infection' (World Bank, 1998: 44).

Prevalence: No information exists on HIV prevalence rates among teaching and other MoE staff. Without this information, it is very difficult to design and implement an effective AIDS management strategy. The only nation-wide source of data on HIV

[5] For a comprehensive review of all studies that have analysed the relationship between HIV prevalence and educational attainment see Glynn and Hargreaves, 2000.

prevalence is the Ante-Natal Clinic (ANC) Sentinel Surveys undertaken by the Ministry of Health at ten sites (see Table 6.13).

All country impact assessments of HIV/AIDs on the education sector in sub-Saharan Africa that have been undertaken to date assume that the overall prevalence rate among teachers is the same as for the adult population as whole.[6] Making the same assumption for teachers in Botswana, the overall prevalence rate among teachers aged 20-49 is 35.8 percent. This is nearly 25 percent higher than the national average (of 29 percent) because, as a group, teachers are relatively young and are, therefore, heavily concentrated in the highest prevalence age cohorts. This is particularly the case among junior secondary school teachers (see Table 6.14).

Table 6.13: Age-specific prevalence rates among prevalent women, 1992-99

Year	15-19	20-24	25-29	30-34	35-39	40-44
1992	16.4	20.5	19.4	16.5	13.5	9.3
1993	21.8	27.1	24.2	16.8	13.3	9.4
1994	20.7	31.5	30.2	18	11.8	8
1995	32.4	34.8	32.6	33.5	11.1	15
1996	27.2	40.9	34	32	25	20
1997	28	41.4	41	33.3	39	23.1
1998	28.6	42.8	45.2	38.2	33.3	23.9
1999	21.5	38.7	43.3	42	33.3	25.5

Source: AIDS/STD Unit, Ministry of Health

Unfortunately, the ANC Sentinel Surveys do not collect any information on the socio-economic background of the pregnant women who are tested. It is not possible, therefore, to reach any firm conclusions on the likely prevalence rates among teaching staff from this source. Only the Debswana Diamond Company has collected recent occupational-specific prevalence data. In March 2000, three-quarters of the total workforce of 5,200 employees agreed to be anonymously tested using saliva samples. Since 90 percent of employees are males, the data is not broken down by gender. The overall prevalence rate was 29 percent. Prevalence rates among

Table 6.14: Percentage of teaching staff under 35

	PRIMARY	CJSS	SENIOR SECONDARY	ADULT
P&P	46.5	72.5	70.4	53.2
ALL STAFF	51.9	81.2	50.7	53.2

the three most senior staff grades (A-C), which are broadly equivalent to MoE teaching staff in terms of educational background, ranged from 18-28 percent. The prevalence rate for unskilled and semi-skilled manual workers (mainly miners) was 35 percent. On the basis of this evidence therefore, prevalence rates for teaching staff are likely to be

[6] Assessments have been undertaken in Mozambique, South Africa, and Swaziland. See Verde, 2001, Abt Associates, 2000 and JTK Consultants, 1999. More limited assessments have been undertaken by Golifer for Kenya, Uganda, Zambia and Zimbabwe (see Golifer, 1999).

lower than for the population as a whole, but it is difficult to establish by exactly how much.

Mortality comparisons: In the absence of the required prevalence data, there is no alternative but to use comparative mortality data in order to reach conclusions about the likely HIV prevalence and expected AIDS-related mortality among teaching staff. Drawing together information from a number of sources, what is particularly striking is the extent to which mortality rates are negatively correlated with socio-economic status.

- Mortality rates among permanent and pensionable industrial class i.e. unskilled workers employed by government and the University of Botswana were 18-23 per thousand in 1999/2000 compared to 7.6 per thousand for MoE teaching staff (see Tables 6.15 and 6.16). Projected AIDS deaths for all adults (15-59) are 14.3-15.9 per thousand in 2000 (AbT, 2000). Reflecting on these very large differences in mortality rates, a senior civil servant in DPSM commented that, 'it seems as though that it is mainly our cousins and other relatives in the villages who are dying'.

Table 6.15: Mortality rates (deaths/000) for teaching and government personnel and overall population, 1997-2000

YEAR	Projected AIDS deaths	BPOMAS members					Government		University of Botswana		
	Overall population	Other	MOE	Teaching staff	Officers	Industrial	Permanent	Industrial	Faculty	support	
1997	8.1 - 9	4.8	3.4	NA			2.7				
1998	10 - 11.1	6.1		NA			NA		4.8	7.5	13
1999	12.1 -13.4	8.4		NA			NA		4.7	6.6	23
2000	14.3 - 15.9	9.4	6.6	7.6	4.6	15	NA	19.6		17	18

Table 6.16: Mortality rates among central government employees, 1999/2000 (deaths/000)

	INDUSTRIAL		PERMANENT	
GRADE	Female	Male	Female	Male
A	10.9	12.2	22.8	18.8
B	8.6	12.1	6.8	12
C	0	0	5.3	9.1
D			3.7	6.8
E			0	0

- Mortality rates among highly educated nationals are relatively low. For example, only two Batswana lecturers at the University of Botswana died between 1991 and 2000 (see Chilisa, 2001).

- The mortality rate for M0E staff who are members of public sector medical scheme is 30 percent lower than the corresponding rate for other public servants.

- Data from the school survey also shows a strong negative correlation between mortality and educational attainment. Among primary school students, for example, 36 percent of parents who are both alive have completed secondary education compared to only 26.8 percent among one or both parents who have died.

- Support staff at schools are reported to be dying in much greater numbers than teachers

Comparing mortality rates of teachers and other government officers in the same grades is also revealing. Mortality rates among both female and male primary school teachers (who are mainly in Grade B) are slightly higher than mortality rates for DPSM staff in these grades, which probably is due mainly to locational factors (see Table 6.17). However, among secondary school teaching staff most of whom are on Grade C, mortality rates are three to four times lower than the corresponding grades among DPSM staff.

Table 6.17: Mortality rates among all government employees and teachers by grade, 1999/2000 (deaths/000)

	ALL GOVERNMENT		**PRIMARY TEACHERS**			
GRADE		Male	Female	Male	Female	Male
B	6.8	12	7.6	12.1		
C	5.3	9.1			1.8-2.1	2.5-3.6
D	3.7	6.8				

Table 6.18 compares the projected AIDS-related mortality rates with total mortality rates for teaching staff for specific age-cohorts. If it assumed that 60-70 percent of teacher deaths are AIDS-related, then AIDS-related mortality is at least four-five times lower among teachers right across the high prevalence (20-39) age cohorts.

Table 6.18: Projected AIDS-related mortality and teacher mortality rates by age cohort, 1999 (deaths/1000)

AGE COHORT	**All adults**	**Teachers**
15 – 19	2.3	na
20 – 24	13.4	3.8
25 – 29	27.9	6.8
30 – 34	30	8.8
35 – 39	20.6	5.8
40 – 44	11.4	6.6
45 – 49	5.4	3.9
50 – 54	2.2	7.3
55 – 59	0.7	6.1

6.2.4 Mortality trends

As noted above, there is no reliable time series data on teaching staff mortality for the last 5-10 years. However, fragmentary data for the last one-two years strongly indicates that teacher mortality has been falling.

- According to the TSM Infinium database, 67 teaching staff died between May-October 1999 and 56 between November 1999 and April 2000. The three-month moving average mortality rate for May-July 2000 is almost exactly half the corresponding figure for May-July 1999 (7.7 and 15.7 deaths/000 respectively).

- Mortality rates among primary teachers in school samples from the Annual Statistical Returns fell appreciably between 1998 and 1999, but increased among secondary school teachers (see Table 6.19).

- BPOMAS records show that total deaths among MoE members and dependants fell from 74 in the last six months of 1999 to 60 during the first six months of 2000.

- Among other MoE staff, department records indicate that the numbers of deaths among officers in grades C-F have been constant or declining since 1996. Total annual deaths among B grade permanent staff have been fairly constant since 1996. Among industrial class workers, deaths rose rapidly for both A and B grades up until 1999, but appear to have fallen during 2000 (see Table 6.20). The Infinium database has information for MoE support staff since 1998. This shows a similar picture with deaths increasing significantly between 1998 and 1999, but decreasing for three out of the five grades between January-November 2000 (see Table 6.21).

Table 6.19: Mortality rates among primary and secondary teachers at 10 percent sample of schools, 1998 and 1999

	PRIMARY			SECONDARY		
YEAR	Female	Male	All	Female	Male	All
1998	9.3	17.7	10.9	1.7	6.6	4
1999	4.6	14.3	6.2	3.9	13.8	8.7

Source: Annual statistical questionnaires from schools

If mortality rates among teaching and other MOE staff are indeed declining or reaching some kind of plateau, then this is quite unexpected and certainly requires more detailed investigation. The only plausible explanation is that HIV prevalence rates among teaching staff are much lower and/or declining faster than the population as a whole. A rapidly growing number of teaching staff are also benefiting from the life-prolonging effects of anti-retroviral drug therapies (see below).

Table 6.20: Deaths among MoE staff, 1995-September 2000

GRADE	1995	1996	1997	1998	1999	2000 (Jan-end-Sept.)
OFFICERS						
F-E	0	0	0	0	0	0
D	1	0	1	1	1	0
C	0	2	2	0	1	0
B	1	1	5	4	2	5
TOTAL	**2**	**3**	**8**	**5**	**4**	**5**
Female	1	1	4	4	1	1
Male	1	2	4	1	3	4
INDUSTRIAL CLASS						
B	0	2	1	5	5	3
A	8	11	10	16	25	15
TOTAL	**8**	**13**	**11**	**21**	**30**	**18**
Female	2	4	4	7	10	7
Male	6	9	7	14	20	11

Notes: Jan-Sept 2000. Excludes Department of Non-Formal Education and Vocational Education and Training. Total staff in post by grade was not available so it is not possible to calculate mortality rates.
Source: Returns from individual departments

Table 6.21: MoE support staff deaths, 1998-2000

		INDUSTRIAL CLASS		PERMANENT&PENSIONABLE		
YEAR	Grade	A	B	A	B	C
1998	Female	2	0	0	1	1
	Male	8	2	0	2	1
	All	**10**	**2**	**0**	**3**	**2**
1999	Female	7	1	1	3	1
	Male	12	2	1	0	3
	All	**19**	**3**	**2**	**3**	**4**
2000	Female	4	1	2	5	0
	Male	3	2	1	3	0
	All	**7**	**3**	**3**	**8**	**0**

Notes: January-September 2000
Source: Infinium database

6.2.5 Other attrition

Table 6.22 shows attrition among TSM teaching staff from all sources. Teacher deaths accounted for around one-third of all attrition during 1999. Attrition is much higher

among males (3 percent) than females (1.8 percent). The number of staff leaving on medical grounds is negligible.

Table 6.22: Attrition of teaching staff, 1999

Reason for leaving	FEMALE		MALE		ALL	
	Number	% total in-post	Number	% total in-post		% total in-post
Deceased	78	0.64	51	1	129	0.75
Ill-health	1	..	3	..	4	0.02
Medical retirement	0	0	1	..	1	..
Compulsory retirement (at 65)	19	0.2	8	0.2	27	0.16
Voluntary retirement (45-64)	14	0.2	11	0.2	25	0.15
Re-deployed within MOE	4	..	5	0.1	9	0.05
Deserted	0	0	4	0.1	4	0.02
Dismissed	1	..	4	0.1	5	0.02
Resigned	32	0.4	13	0.4	45	0.26
Seconded	3	..	3	..	6	0.03
Unknown	66	0.8	47	1.4	113	0.65
TOTALS	**218**	**1.8**	**150**	**3**	**368**	**2.13**

Notes: May-December 1999 departures annualised

6.3 JOB PERFORMANCE

6.3.1 Absenteeism

Overall levels: Most schools do not keep adequate records of teacher absenteeism. Consequently, it is not possible to calculate absenteeism rates during the last five years. Table 6.23 shows levels of absenteeism among teacher questionnaire respondents (i.e. those who were at school on the day of the survey) during the second term up to the time of the survey. For primary schools, this was 21-30 days and for secondary schools 36-40 days. Around 5-7 percent of teacher respondents had been absent for more than a week.

Table 6.23: Teacher absenteeism at the survey schools (percentages)

		DAYS ABSENT						
		0	1	2	3	4	5	6+
PRIMARY	Female	48	14	13	8	4	5	5
	Male	41	33	17	5	4	0	0
SECONDARY	Female	36	19	17	9	7	5	6
	Male	59	12	1	11	1	3	7

The overall absenteeism rates are presented in Table 6.24. These are considerably higher among female teachers and absenteeism is slightly higher at primary schools. In general, teacher absenteeism is not considered to be particularly high by school

managers. Similarly, less than a third of both student and teacher questionnaire respondents indicated that 'teacher absenteeism is a problem in this school' (see Table 6.25). Furthermore, only 5-6 percent of primary and secondary teachers agreed with the statement that 'teacher absenteeism has increased significantly as a result of AIDS'.

Table 6.24: Teacher absenteeism rates at the survey schools, First term 2000 (percentages)

		CJSS	SENIOR SEC
Female	7.4	6.2	6.1
Male	4.2	2	3.7

Table 6.25: Teacher response to the statement 'teacher absenteeism is a serious problem in this school' (percentages)

	QUESTIONNAIRE		
	Disagree	**Not sure**	
STUDENTS			
Primary	41	19	31
CJSS	45	31	21
Senior sec	57	19	24
TEACHERS			
Primary	65	10	22
CJSS	67	19	13
Senior sec	64	20	12

Reasons for absences: Much higher proportions of female teachers are absent due to personal illness than male teaching staff. Around 10 percent of teachers had taken at least one day off to attend a funeral and another 5-11 percent to look after people who are ill (see Table 6.26).

Table 6.26: Reasons for absenteeism among teachers at the survey schools, First Term 2000

		Sick	Funeral		School-related	Other
Primary	Female	25.8	10.9	10.9	9.4	4.7
	Male	20	8	8	0	20
Junior secondary	Female	33.3	6.9	5.5	4.2	16.7
	Male	10.9	8.7	6.5	6.5	8.7
Senior secondary	Female	26.8	12.2	17	12.2	19.5
	Male	13.3	11.7	10	18.3	8.3

Notes: Figures show percentage of teacher questionnaire respondents who had taken at least one day off by the time of the survey visit for each of the specified reasons

School managers at three-quarters of primary survey schools reported that 1-2 teachers were 'persistently sick' (see Table 6.27). One primary school in Francistown had seven sick teachers, most of who had been transferred from other schools in order to be near the referral hospital.

Table 6.27: Number of teachers reported to be persistently sick at survey schools

	NUMBER ILL							
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**
PRIMARY	2	4	2	0	0	0	0	1
SECONDARY	0	6	1	2	0	0	0	0

Apart from long-term illness, attendance at funerals is the next most serious AIDS-related absenteeism problem at most schools. In particular, Fridays are increasingly being disrupted. As one primary school teacher commented, 'Teachers going to funerals on Fridays prevents this day from being effectively utilised. All activities are packed or squeezed into the other days'. A primary school Head teacher complained that 'teachers who come from other parts of the country leave (to attend funerals) on Thursday and sometimes don't get back until mid Monday'.

6.3.2 Motivation and morale

Low teacher morale is a serious problem in many schools. Less than half of teacher questionnaire respondents at all three types of school agreed with the statement that 'teacher morale at this school is high' (see Table 6.28). There are, of course, many possible reasons for low morale, which are not directly related to HIV/AIDS. While it is clear that the some teachers are being affected by increasing levels of staff morbidity and mortality, the overall incidence of AIDS-related deaths is still too low to have a major impact on morale. The average number of deaths per school between May 1999 and April 2000 was 0.11 at both primary and junior secondary schools and 0.16 at senior secondary schools.

Table 6.28 Teacher performance statements: morale and effort

Teacher morale at this school is high

	QUESTIONNAIRE		
	Disagree	**Not sure**	**Agree**
TEACHERS			
Primary	22	27	46
CJSS	29	37	31
Senior sec	34	32	30

Teachers at this school are hardworking

	QUESTIONNAIRE		
	Disagree	**Not sure**	**Agree**
STUDENTS			
Primary	12	15	69
CJSS	13	13	72

Senior sec	17	14	70

Around two-thirds of student questionnaire respondents agreed with the statement that
'teachers in this school are hardworking', but there was much less agreement among the student focus group respondents at junior secondary schools.

6.4 Human resources planning

Planning in the MoE is fairly rudimentary. Consequently, as one senior manager put it, 'we are always in crisis management mode'. Given the severity and long term impacts of the epidemic, it is essential that more detailed, comprehensive planning, especially with respect to human resources, is undertaken on an on-going basis.

6.5 AIDS IN THE WORKPLACE

6.5.1 Overview

There are a variety of employment 'best practices' that should be adopted by organisations in high prevalence countries in order to prevent and mitigate the impact of HIV/AIDS on their staff. These include comprehensive prevention programmes (information, behaviour change, contraception), counselling with and without testing, medical support (including the provision of anti-retroviral drugs), adaptation of working arrangements and delivery of services; multi-skilling; and modifying employee benefits.

Government: GoB is the largest employer in the country. However, DPSM has only very recently begun to make concerted and systematic efforts to formulate and implement an 'AIDS in the workplace' (AIWP) programme for government employees. A HIV/AIDS Code of Conduct for the public sector was drafted in 1997, but this has still to be implemented. A counselling service for public servants is to be started in late 2000.

No changes in the current conditions of service (recruitment, pay and pensions, sickness, and retirement) for public servants are envisaged as a result of the AIDS crisis. This is because 'we cannot discriminate against people with HIV/AIDS… AIDS should be treated in the same as any other disease, such as diabetes' (DPSM senior manager).

Ministry of Education: In the absence of any government-wide initiative, it is perhaps not surprising that the MoE does not itself have a comprehensive AIWP programme. Generally speaking, there is very little awareness or understanding of AIWP policy and practice among senior management in MoE. In part, this is because personnel management is conceived as a largely administrative function. Another key factor is the division of 'administrative' and 'professional' responsibilities between TSM, on the one hand, and the Departments of Primary, Secondary, and Vocational Education and Training, on the other.

The overwhelming view of informed outsiders is that the MoE still has a 'massive amount to take on board' in relation to AIWP policies. Given the lack of leadership and direction from the ministry, schools have done very little to try to minimise the impact of AIDS

on teachers and other staff. While, on a day to day level, headteachers and school management teams are dealing as best they can with specific AIDS-related problems, the overall response to date has generally been very inadequate.

The findings of the survey school highlight the general lack of support for teaching and other staff affected by HIV/AIDS. Only 8-15 percent of teacher questionnaire respondents agreed with the statement that 'teachers who are HIV positive are being properly supported by school management' (see Table 6.29). Management leadership in schools is a key concern. The PSMDP Baseline Survey found that, at about half of the 80 schools in the survey, relations between headteachers and their staff were 'strained' with teachers often falling into different 'camps' within the school. Similarly, at the survey schools, barely one-half of primary school and one-third of secondary school teacher respondents agreed with the statement 'teachers can discuss their personal problems with school management'. Tackling AIDS in the workplace in the education sector will, to a very large extent, depend on how quickly management attitudes and competencies in this critically important area can be strengthened.

Table 6.29: Teacher support statements

Teachers can discuss their personnel problems with school management

	QUESTIONNAIRE			FOCUS GROUP		
	Disagree	Not sure	Agree	Disagree	Not sure	Agree
TEACHERS						
Primary	32	22	46	55	36	9
CJSS	38	30	32			
Senior sec	37	41	22			

Teachers who are HIV positive are properly supported by school management

	QUESTIONNAIRE		
	Disagree	Not sure	Agree
TEACHERS			
Primary	29	54	15
CJSS	26	59	12
Senior sec	12	80	8

In-service training on HIV/AIDS has been adequate

	QUESTIONNAIRE		
	Disagree	Not sure	Agree
TEACHERS			
Primary	54	36	9
CJSS	64	23	13
Senior sec	74	21	4

Most school managers commented that in-service training on HIV/AIDS issues has been very limited and that school inspectors have not played any significant role. Only a small

minority of teacher questionnaire respondents agreed with the statement 'in-service training on HIV/AIDS has been adequate' (see Table 6.29).

Teacher unions: None of the three teaching trade unions in Botswana have actively campaigned about and/or negotiated on any AIWP issue. Their almost exclusive focus has been on improving salaries and other benefits (especially transport and housing). As democratic organisations, they are merely reflecting the views and demands of their respective memberships.

6.5.2 HIV/AIDS education

There has been very little targeted HIV/AIDS education for teaching staff. At the survey schools, AIWP issues are rarely, if ever, discussed in staff meetings and there is no peer education. However, it is clear that most teachers and many school managers are poorly informed about HIV/AIDS. Denial about the causes, extent, and consequences of HIV/AIDS is widespread in the teaching community. As one primary teacher put it 'HIV/AIDS is the best-kept secret… Most teachers deliberately do not change their behaviour precisely in order to emphasise to others their lack of vulnerability and freedom of suspicion'.

Little is known about the sexual behaviour of teaching staff. Obtaining this kind of information is not easy, but it is essential for the design of effective information and education programmes and in order to monitor properly the impacts of AIWP interventions.

6.5.3 Anti-discrimination

The general view is that teaching staff in Botswana and elsewhere in SSA who are living with AIDS are seriously discriminated against by school managers, teaching colleagues, and students. The findings of the school survey show high levels of secrecy and denial among teaching staff concerning the likely extent of HIV infection and clinical AIDS. Given the very considerable stigma that is attached to HIV/AIDS, teachers are not prepared to reveal their HIV status because they are worried about the adverse reaction among colleagues and the community as a whole. In some schools, very ill teachers continue to work for fear of being talked about as being infected. However, there appears to be little or no overt discriminatory behaviour at any of the survey schools. The following comment made by a Head teacher at a senior secondary school is typical of verbal and written responses on this issue: 'There is no discrimination against the sick in this school, but in the outside community there is lots of gossip and discrimination'. Numerous examples were given of how sick teachers have been supported by their colleagues at the survey schools.

Teacher responses to questionnaire statements concerning discrimination also support this view. Fewer than 10 percent of respondents agreed with the statements that teachers who are HIV positive are discriminated against either by the MoE itself, school management or other teachers (see Table 6.30). However, large proportions of respondents indicated that they are 'not sure' if discrimination is occurring, which is symptomatic of the secrecy that surrounds this whole issue coupled with the fact that relatively few teachers have become ill.

While levels of overt, serious discrimination are low, many teaching staff are clearly concerned about the risks of working with infected teachers. Various incidents were reported concerning the sharing of cooking and eating utensils and toilet facilities. With appropriate education programmes, most of these concerns could be allayed.

Table 6.30: Teacher responses to staements concerning discrimination against colleagues directly by HIV/AIDS (percentages)

Teachers who are HIV positive are discriminated against by the Ministry of Education

	QUESTIONNAIRE		
	Disagree	Not sure	Agree
TEACHERS			
Primary	74	22	3
CJSS	44	52	4
Senior sec	28	67	4

Teachers who are HIV positive are discriminated against by school management

	QUESTIONNAIRE		
	Disagree	Not sure	Agree
TEACHERS			
Primary	77	20	2
CJSS	47	49	4
Senior sec	35	64	0

Teachers who are HIV positive are discriminated against by other teachers

	QUESTIONNAIRE		
	Disagree	Not sure	Agree
TEACHERS			
Primary	68	20	11
CJSS	44	44	10
Senior sec	44	59	3

6.5.4 Testing for HIV

Until recently, testing and counselling services have not been widely available in Botswana. However, recognising the key role of testing in both the prevention and mitigation of HIV/AIDS,
GoB is now establishing a national network of testing and counselling centres as a top priority. Two centres are currently operational in Gaborone and Francistown.

MoE has no explicit policy on testing and counselling of its staff. Teachers at the survey schools were not asked if they had been tested, but it seems clear from their general responses that relatively few teachers have voluntarily submitted to testing.[7] This is symptomatic of the widespread fear and denial among teaching staff concerning HIV/AIDS.

It is government policy that all expatriate teachers must be tested prior to taking up their employment. Individual teachers from countries where test results and/or certification are not considered sufficiently reliable are tested once they arrive in Botswana. Otherwise testing is done in the home country. Only individuals who are HIV negative are employed. Contract renewal is also conditional on HIV status. There is a widespread misperception among both expatriate and national teaching staff that only individuals from high prevalence African countries are tested and that therefore testing policy and/or practice is discriminatory.

6.5.5 Transfers

High transfer rates could predispose teaching staff to HIV infection if this results in more sexual partners than would otherwise be the case. However, there is no direct evidence available from any country in SSA or elsewhere to test this proposition. It is also widely believed that transfer rates will increase as the AIDS epidemic deepens.

[7] This is certainly the case for those teachers who are HIV asymptomatic.

Sick staff will want to be posted near hospitals and other health facilities where they can receive proper treatment. In addition, many sick single teachers will want to be looked after by their parents or other friends and relatives, and teachers will themselves be called upon to look after sick dependants and other relatives, often in their home areas. This will complicate still further the deployment of teaching staff, especially in less attractive rural and remote areas. However, no information is currently collected that would enable a proper assessment to be made of the extent to which transfers are AIDS-related.[8]

The available data on the number and incidence of teacher transfers for the period 1995-2000 is presented in Table 6.31[9]. It can be observed that there has been no noticeable increase in transfer rates during the last five years.

Table 6.31: Teacher transfers, 1995-2000

		PRIMARY		SECONDARY	
YEAR	Data source	Number	Transfer rate	Number	Transfer rate
1995	ASR	729	7.3	451	7.8
1996	ASR	1090	10.5	601	9.8
1997	ASR	1023	9.6	501	8.6
1998	ASR sample	na	11.2	na	na
1999	ASR sample	na	10.6	na	na
2000	Infinium	889	7.7	808	9.7

Notes: Jan-November 2000

Over three-quarters of teacher transfers are intra-regional. Although data is limited, there do not appear to be sizeable differences in transfer rates between female and male teachers working in the same type of school.

6.5.6 Spouse separation

The separation of spouses has been always been a contentious issue, but HIV/AIDS has heightened concerns about spouses living apart. In response to these concerns, GoB General Order 12 requires that, wherever possible, spouses should be able to live together. Clearly, separating spouses seriously disrupts normal marital and family life, quite apart from additional concerns about separated spouses engaging in high-risk sexual behaviour. But it is also true that deploying single teaching staff to remote locations may also expose them to additional risks.[10] A number of interviewees stated that, because there is a shortage of 'suitable' partners in most remote locations, female teachers are more likely to have casual sexual encounters with visiting government personnel (including drivers).

[8] Between April-August 2000, only two requests for inter-regional transfers on health grounds were received by TSM in Gaborone.
[9] There are no formal time limits before a teacher can apply for a transfer
[10] 82 percent of female teachers at 'remote' primary schools are single compared to only 50 percent at urban schools. Nearly a quarter of teachers at remote primary schools are male compared to only 10 percent at urban schools (see MoE/PSMDP, 2000).

Despite the importance of this issue, no information is available on the number of teachers who are separated from their spouses. During the first half of 2000, TSM received only 'a few' letters concerning marital separation (mostly from non-teaching husbands who make transfer requests on behalf of their wives).

6.5.7 Teaching cover

For short absences, proper teaching cover is rarely available. The normal practice in primary schools is that when a teacher is absent, his/her class is usually split up and distributed among the other classes in the same standard (or another standard if this is not possible). Consequently, without appropriate action, increasing teacher absenteeism as a result of HIV/AIDS will lead to larger classes.

In the past, the availability of Tirelo Sechaba Participants[11] (TSP) as de facto untrained 'supply teachers' has been a key resource. A total of 1,500 were deployed in primary schools in 1997 (i.e. an average of two per school). However, with the decision to end the scheme, this sizeable cadre of relatively well educated, untrained teachers will no longer be available. Many school managers commented on the additional staffing problems that will arise as a result of the withdrawal of TSPs. Certainly, there was a strong feeling that the timing of their departure is unfortunate, given the anticipated impact of HIV/AIDS on the staffing situation in schools.

A replacement temporary teacher can be only be appointed once a teacher has been granted long term sick leave. This is initially for six months and then, if necessary, for a further six months. However, despite the increase in AIDS-related illness, very few teachers are on long term sick leave. There are a number of reasons for this:

- The levels of stigma and denial around AIDS are such that most sick teachers continue to work even though this seriously worsens their condition and they are frequently unable to teach their classes properly. When they are too ill to come to work, most doctors continue to give sick notes for the days that they are absent.

- Most doctors are reluctant to 'sign off' affected teachers for long term sick leave.

- Teachers are concerned about loss of income, both in the short and long term. Government employees on long term sick leave are entitled to full pay for the first six months, but then only receive half pay for the next six months. Teachers fear that once they take long term sick leave, they are unlikely ever to return to work.

- The professional commitment of most sick teachers is such that they keep on teaching even when they are too ill to do so properly. Many feel 'tortured' about leaving their classes unattended.

If, at the end of 12 months, the teacher is still unable to return to work, then a Medical Board must decide whether or not the individual should take medical retirement.

[11] TSP scheme was for Form 5 school leavers who were required to do some form of community service for a year before going on to higher education.

However, Medical Boards for MoE staff are very rarely convened. Between May-December 1999, only one person on the TSM payroll was retired on medical grounds

6.5.7 Sickness, retirements and other benefits

There have been no changes to any benefit entitlements and related regulations as a consequence of HIV/AIDS. As noted above, the main reason for this is not wanting to discriminate in any way against affected teaching staff.

6.5.9 Medical support

Proper medical support is critically important during any epidemic, but this is especially the case for one as devastating and as widespread as HIV/AIDS. Permanent and pensionable public servants and foreign contract staff are entitled to join the Botswana Public Officers Medical Aid Scheme (BPOMAS). Total membership (excluding spouses and dependents) was 39,235 in August 2000. There were only 23,047 members in 1997/98. A growing realisation among public servants of the seriousness of the AIDS crisis has undoubtedly been the major factor fuelling this very rapid growth in membership.

Table 6.32: MoE staff belonging to BPOMAS, August 2000

MoE Group	Total Members	% eligible
Primary	5122	49.4
Secondary	4316	61.9
Colleges	376	74
Other MOE	1533	86.8
Total	11347	57.8

Notes: Membership by gender not available

Half of all primary school teachers and 40 percent of secondary school teachers do not belong to BPOMAS (see Table 6.33). In contrast, over three-quarters of MoE officers and lecturers at the Colleges of Education are members. Why, then, is membership so low among teaching staff?

Teacher questionnaire respondents were not specifically asked about medical care and medical aid schemes nor did these emerge as major issues in the focus group discussions or individual interviews. However, membership may be particularly low among primary school teachers, because many are at working at schools in remoter locations where access to private health care facilities is non-existent or difficult. These teachers may, therefore, see little benefit from being covered by medical aid.

The overall cost of belonging to BPOMAS is also likely to be a significant disincentive. Although government contributes 50 percent, membership contributions account for a sizeable proportion of teacher's pay (see Table 6.33). For example, contributions are between 10.1 to 12.5 percent of the gross salary of a PTC qualified primary school teachers with five dependants who is on grade B3. The burden of contributions decreases significantly at higher grades, where school managers and secondary school

teachers are concentrated. Although there is some cross-subsidisation from higher to lower grade members, the scheme is still quite regressive.

Table 6.33: Medical aid contributions as a percentage of gross salary, 2000

Grade	% in each grade			Medical aid as % salary	
	Primary	CJSS		No dependants	5+ dependants
B4	5.3	15.5	1.3	6.1	12.8
B3	17.2	0	0	6.5	12.5
B2	9.7	0	0	5.3	10.3
B1	21	0	0	5.7	10.4
C4	27.7	35.7	0	5.3	9.1
C3	6	25.6	41	4.3	7.4
C2	7.2	7.2	29.6	4.3	7.4
C1	5.7	9.6	12.3	3	5.2
D4	0	3.2	13	2.7	4.6
D3	0	3.1	1.5	2.4	4.1
D2	0	0	1.3	2.1	3.6

Notes: Starting salaries for each grade.

The benefits of being covered by medical aid may also not be widely known among teaching staff. In particular, if they were properly informed about the potential of anti-retroviral drugs to prolong-life and minimise illness, it seems likely that many more would want to join. Only a tiny fraction of teachers who are likely to be infected are currently taking ARTs. Even so, the mortality rate differential between MoE staff who are members of BPOMAS and those who are not is around 15 percent. Part of the reason why mortality rates are so much higher among industrial class is precisely because they are not covered by medical aid schemes, (although clearly there are other important factors that must be taken into account).

6.5.10 Anti-retroviral drug therapies

Overall effectiveness: There is still considerable controversy, uncertainty, and ignorance about the (medical and cost) effectiveness of anti-retroviral drug therapies in reducing HIV viral load and prolonging life, both in Botswana[212] and elsewhere. However, the evidence from developed and higher income developing countries (such as Brazil[13]) is that, with proper patient compliance and medical support, ARTs are highly effective. Clearly, there are major concerns about the affordability of these drug therapies, especially in countries in SSA. However, given its small population, relatively good medical infrastructure, and very sizeable economic and financial resources, Botswana is not typical and should, therefore, be considered as a special case.

[13] The mass provision of ARVs in Brazil has reduced AIDS-related mortality rates by a half since 1997.

Senior fund managers at BPOMAS and the Botswana Medical Aid Scheme were interviewed.[14]. They strongly endorse the use of ARTs in Botswana. Among the 600 BOMAID members who were enrolled on its HIV scheme in mid-2000, ARTs have been 'highly effective in 80-90 percent of cases' (BOMAID, Fund Manager). By August 2000, only 8.4 percent of BPOMAS members who were being prescribed ARTs in 1998/99 had subsequently died.[15]

BOMAID actively manages the medical treatment of each member who belongs to its ART scheme with the result that patient compliance with the prescribed drug regimes is high.[16] This is crucial because non-compliance as a result of either inadequate self-discipline and/or financial problems can result in the worsening of a patient's condition. BPOMAS members are not, however, closely monitored and, coupled with lower incomes among public servants, non-compliance is reported to be quite high.

Quite apart from their direct medical benefits, the mass provision of ARTs would be a major incentive for teaching staff to test for HIV. This, in turn, would help to transform the current climate of secrecy and denial in schools, thereby creating the necessary enabling environment for the successful implementation of a comprehensive strategy of prevention and mitigation.

Provision and management: Approximately 93 percent of BPOMAS members and their dependants are eligible for ARTs under the 'high benefit option'. The total number of members accessing these drugs increased from 315 in 1997/98, to 631 in 1998/99, and was around 900 in mid 2000.

Table 6.34 shows that the number of teachers and other MoE staff taking ARTs has increased very rapidly during the last 18 months - from 86 in 1989/99 to 253 in November 2000. Since BPOMAS does not actively manage the drug therapies for each manager, it is not known how many of these individuals are HIV asymptomatic and symptomatic i.e have clinical AIDS. However, BOMAID does actively manage its ART programme. Over 90 percent of individuals who were being prescribed ARTs in late 2000 already had AIDS-related opportunistic illnesses. A similar breakdown among teachers and other MoE staff on ARTs would be the single most important explanatory factor for the decline in mortality during 1999/2000. More specifically, these drugs could have prolonged the lives of up to 225 individuals, many of whom would otherwise have died of AIDS-related illnesses.

[14] BOMAID covers private sector companies and major parastatals, including the university and had 48,000 members in mid-2000

[15] However, without a proper control group, it not possible to say what difference these drugs have made

[16] Because BOMAID actively manages each member's ARTs therapy, doctors are much less able to over-prescribe. All ARTs are dispensed centrally and buying in bulk enables BOMAID to obtain fairly large discounts from suppliers in South Africa. BPOMAS is planning to actively manage its ART programme from 2001.

Table 6.34: MoE personnel on ARTs, 1998-2000

	1998/99	Nov-00
Primary	10	130
Secondary	52	78
Other MoE	24	34
Colleges		11
Total	86	253

Source: BPOMAS

Costs and affordability: The basic BPOMAS entitlement for ARTs was P8000 per family per year in mid 2000. If necessary, an additional *ex gratia* payment of up to P8000 per annum is also normally granted. It is expected that both these payments will be increased to P10000 by the end of 2000. The annual cost of a typical double combination ARTs drug therapy was P14400-18000 in 2000 and triple combinations with protease inhibitors (known as HAART- highly active anti-retroviral therapy) cost P36000 per year. Consequently, while all BPOMAS members are fully covered for most single and double combination ARTs therapies, the shortfall for HAART was P20000. Even if this shortfall decreases to P16000 by the end of 2000, HAART, which is the medically most effective treatment, is still beyond the financial reach of most teachers.

6.5.11 Sexual misconduct

As discussed earlier, sexual relationships are relatively common between male teachers and female students at CJSS and senior secondary schools. TSM regulations expressly forbid any kind of sexual relationship between teaching staff and students. Anyone who is found guilty of such behaviour is permanently expelled from the teaching service. In practice, however, very few teachers (less than five in 1999) have been dismissed for professional misconduct of this kind. It is rare for cases to reach court, mainly because the female students who are involved are unwilling to bring charges and/or testify. Accused teachers also frequently put 'pressure' on the parents of the female student, with many of them being 'bought off' by promises of marriage and/or monetary 'compensation'. For those cases that do reach court, the burden of legal proof is so great that the majority of cases result in acquittals.

In spite of the genuine concern among MoE senior management about teacher-student 'love relationships' and other forms of sexual harassment, little has been done to tighten either the law or TSM regulations in this area.

PART II: WHAT SHOULD BE DONE?

The second part of this study focuses on what should be done by the MoE and its partners in order to ensure that the impact of the HIV/AIDS scourge on the education sector is minimised as efficiently and effectively as possible.

CHAPTER 7

HIV/AIDS PREVENTION AMONG STUDENTS

The MoE has made considerable efforts to introduce effective HIV/AIDS education through curriculum revision within subject disciplines and strengthening guidance and counselling. The process is not yet complete and the revisions have not been fully implemented. It is clear, however, that there are pervasive concerns both in schools, among MoE senior management and professional support staff, and among well-informed outsiders that the integration and infusion approach is 'simply not working'. These concerns relate to both curriculum content and delivery. It is equally clear that G&C teachers, especially in primary schools, are currently unable to provide the level of support and pastoral care needed for effective HIV/AIDS prevention in schools.

Given the extent of the AIDS epidemic in Botswana, far more needs to done to ensure that school children have the knowledge and skills that will enable them to avoid infection. On its own, integration and infusion of discrete AIDS/HIV topics into the subject curriculum is not sufficient. A comprehensive and holistic AIDS prevention strategy needs to devised, which focuses on all the key contributory factors which contribute to HIV infection among children and youth. This strategy must cover not only knowledge and skills (education and training), but also contraception, guidance and counselling, improved livelihoods, and improved security and elimination of sexual harassment.

Preventing HIV is difficult and complex. Sexual behaviour is deeply embedded in individual desires, social and cultural relationships, and economic and environmental processes. Given that sexual activity is to a large extent socially constructed, the root causes of high-risk behaviour have to be addressed. It is particularly important for teachers and students to understand the 'narratives of AIDS'. i.e. how people define and make sense of the disease. AIDS is still widely regarded by many people in Botswana as the direct result of sexual pollution and/or witchcraft.

This chapter focuses on what should be done with respect to the following prevention issues: information and research, school-based AIDS counsellors, education, condom provision, parental involvement, improved livelihoods, and sexual harassment.

7.1 INFORMATION AND RESEARCH

Good quality information on the sexual behaviour of school children is essential in order to develop effective HIV/AIDS education programmes. As discussed earlier, this information does not exist in Botswana. It is recommended therefore that a comprehensive study is immediately commissioned that will inform interventions in this area.

Schools themselves should also collect relevant information on an on-going basis. For example, one teacher interviewee suggested that 'the clinics should supply the schools

with the number of students who visited them per month/term who had sexually transmitted diseases so that at least we can be in a position to quote figures when we counsel students'.

The most effective way of monitoring the impact of school-based HIV/AIDS education would be to periodically test for HIV among a carefully selected sample of students. The test would be voluntary and anonymous and students would only have to provide a saliva or urine sample.

7.2 HIV/AIDS AND LIFE SKILLS EDUCATION

AIDS education is critically important. It must not, therefore, be treated as 'just another subject' (Kelly, 2000). While many school managers and teacher have understandable reservations about what schools should do in this area, schools must not shy away from AIDS education. Ideally, parents and guardians must take primary responsibility, but given deep-seated social/cultural inhibitions, schools will have to continue to play a leading role for some time to come.

7.2.1 Integration and infusion

The integration and infusion approach needs to be strengthened in a number of areas. There is a serious shortage of well-designed materials to make integration and infusion 'a reality' in all the relevant subject areas. The curriculum certainly needs to be more prescriptive, especially at the secondary level.

Start early: HIV/AIDS and family life education should begin in Standard 1.

Training: The diploma curriculum at the teacher training colleges must be revised in order to ensure that all newly trained teachers are able to integrate and infuse HIV/AIDS topics into the subjects they will be called on to teach. More generally, far more emphasis needs to be given to developing guidance and counselling competencies. It is vital, therefore, that the review of the teacher training curriculum be completed as soon as possible so that the colleges can start graduating teachers who are more confident and capable of dealing with HIV/AIDS and related issues.

In-service training for all serving teachers should also be intensified. It is recommended that all teachers attend a two-day workshop on HIV/AIDS education during 2001 and 2002.

Additional topics: The following additions to the curriculum guidelines for secondary schools are proposed. These are intended to either bring in more nuances or to cover aspects of HIV/AIDS, which are not adequately covered at present.

Agriculture: Impact of HIV/AIDS on household labour and safety issues.
Design and Technology: Year 2 Community Service Orientation, include HIV/AIDS as a concern around which design could be developed.
Mathematics: Understanding prevalence rates, infection rates, etc.
Art: Safety issues in the use of materials and use of art as a form of biography and autobiography for those affected by HIV/AIDS.
English: Biography, memory books, HIV/AIDS as a topic of composition, comprehension.

Business studies: AIDS in the workplace issues.
Science: Preventing contagion in the case of bleeding etc and the role of breast-feeding in the case of HIV positive mothers.

The current primary curriculum explicitly covers HIV/AIDS in Standard 7, after basic sexual reproduction in Standard 6. As the on-going curriculum revisions continue, there should be more textured treatment of both topics. They can be introduced as early as Standard 1 by teaching children to protect themselves against sexual abuse (good touching and bad touching) and introducing such areas as the proper handling of patients with infectious diseases.

7.2.2 Life skills education

'The Ministry should come up with a comprehensive curriculum rather than the confused infused programme'

'HIV/AIDS should be included in the curriculum in a broad way. It is too shallow at the moment'

The integration and infusion approach provides basic factual, mainly bio-medical information about HIV/AIDS. While this is very important, this knowledge will not, on its own, lead to any significant change in adolescent behaviour. There is, therefore, a urgent need to go much further and introduce a complementary SRH curriculum, which specifically focuses on the development of the attitudes and other essential psycho-social skills that will enable young people to lead healthy lives.

Experiences from other countries in SSA and elsewhere provide very strong support for this recommendation. In particular, the main conclusion of a review conducted for UNICEF of HIV/AIDS education programmes in East and Southern Africa concludes that 'stand alone life skill programmes with separate lessons have a better chance of succeeding than those that are infused in the curriculum' (Gachuhi, 1999; 20). However, given the gravity of the AIDS crisis in Botswana, both types of intervention are needed.

Curriculum content: It is recommended that all students in both primary and secondary schools have at least one time tabled lesson a week (but preferably two), which is specifically devoted to HIV/AIDS issues and related life skills training. In secondary schools, the 40-minute period that is already time tabled for guidance and counselling should, for the foreseeable future, be used exclusively for this purpose.

These classes would help students develop the knowledge and skills needed to avoid infection. All the key life/survival skills should be taught. Most of these are already covered in the G&C curriculum guidelines, but they needed to taught in a more intensive, focused manner. In particular, HIV/AIDS issues should be explicitly included in the following topics:

Decision making skills
Rules and regulations in a work-place
Values clarification
Planning a family

Adolescence (emotional and cognitive developments characteristics of adolescence, the impact of adolescence on behaviour and personality, coping strategies for dealing with the rapidity and extent of adolescent change)
Teenage pregnancy (traditional practices that condone and may lead to teenage pregnancy, myths and facts leading to teenage pregnancy)
The extent to which adolescent lifestyles are affected by the mass media.
Money management (value of insurance, investments, wills etc)
Responsible parenthood
Young adulthood (constraints within their lives, outline strategies to cope with the constraints and perils of young adulthood, comment on their experiences as young adults).

Added emphasis also needs to be given to such areas as the rationale and strategies for postponing or avoiding sexual initiation; alternatives to penetrative sex, like masturbation and using the thighs. Assertiveness training for girls is a very important topic that has been omitted.

Curriculum delivery: As with any other subject, there should be specialist, Guidance and Counselling teachers who have both the professional commitment and expertise to meet the required learning objectives in this area. Given the enormity of the AIDS crisis, every primary and secondary school should have a full-time G&C teacher. This person should be responsible not only for teaching SRH lessons, but also providing counselling and other support to both students and staff who are affected by the AIDS scourge (see Chapters 8, 9 and 10). Larger schools will almost certainly need more than one full-time G&C teacher.

It is recommended that a staffing plan is developed immediately which will ensure that this objective is met by the end of 2003. Meeting this deadline will be much easier in secondary schools where G&C teachers are already employed on a half-time basis. For primary schools, however, this poses a much greater challenge. At least 750-1000 serving teachers will need to be carefully selected and given intensive training. While the majority of these individuals will already be the designated G&C teachers, other staff who have the aptitude and commitment should also be considered. A well-designed six-week course with high quality instruction would provide sufficient initial training. The design and delivery of this training programme would almost certainly have to be contracted out to an appropriate organisation(s).

Once these teachers have been trained, they must not feel abandoned at the school level. Both for morale and to promote quality control and effective supervision, they need to be located within a management structure that will ensure that they get all the support they need and that policy is being implemented at the school level. It is recommended therefore that G&C Education Officers are posted in each of the Education Regions.

Pedagogy and learning materials: The new SRH curriculum must be learner-centred and highly participatory. Students, particularly at secondary school, are tired of being 'preached' to about HIV/AIDS, but they are keen to address all issues concerning about their sexuality and other related matters. Only full-time, professionally trained 'counsellors' will have the confidence and expertise to gain the respect of students. The specialist SRH curriculum must be based on well-designed learning materials, which

utilise the full range of media. As was repeatedly pointed out, 'students tend to be bored easily when they listen to various speakers with no form of visual AIDS like a film show.' It is essential, therefore, that a wide range of audio-visual materials is assembled, and where, necessary produced, which can supplement conventional textbooks and other print media. Every school must have the necessary equipment (tape recorders, television, and video players) to utilise fully these audio-visual materials.

It is recommended that a specialist team is assembled immediately in order to design the new SRH curriculum. Given the urgency of this task, it is likely that a significant amount of outside expertise will need to be contracted in by the MoE. The curriculum needs to ready for use in the training programme for SRH teachers by early 2002.

7.2.3 Peer education and anti-AIDS clubs

In many countries around the world, peer-led risk reduction have successfully changed unhealthy or risky behaviours among adolescents. A concerted effort is needed in Botswana, therefore, so that school-based peer education in this area is given the attention it deserves. The PACT programme, in particular, needs to be strengthened as a top priority. If properly trained and supervised, secondary school students could be very effective peer educators in primary schools. Promoting peer education would be a key responsibility of the full-time G&C teachers.

It is also important that students be actively encouraged to form anti-AIDS clubs. Taking on some of the responsibility for informing each other and supporting each other in safe behaviours and positive attitudes is both empowering and reinforces other messages. The approach should be flexible and encourage discussion of ethics and the development of codes of conduct. They could be stand-alone clubs or form part of the agenda of other existing clubs. For example, football and netball clubs can be encouraged to discuss sexual behaviour during school trips to attend competitions. It is recommended that a education officer is given full-time responsibility for promoting peer education and anti-AIDS clubs in schools.

It is also recommended that:

Each education region has its own mobile theatre group staffed with professional actors, which should visit every school at least once a year. Theatre of this kind has been a highly effective form of AIDS education throughout the world.

People living with AIDS should be fully involved in peer and other education activities.

Students should be fully informed and, where appropriate, involved in community-level HIV/AIDS programmes.

7.3 SCHOOL HEALTH PROGRAMME

'I want my school to be visited by nurses and doctors so that students really understand what AIDS is, because when teachers are teaching, students take it lightly'

At present, the School Health Programme only really exists in name only. Given the gravity of the AIDS epidemic it is extremely important that it is strengthened as

quickly as possible. In particular, medical personnel need to be far more involved in SRH education and there should be better provision of SRH services to children, both in and out of school

It is recommended that:

The MoH should be encouraged to provide medical services directly to schools, particularly large junior and senior secondary schools.
The promotion of the development of adolescent-friendly reproductive health clinics, in schools or near schools, should be a top priority for government.
The nursing staff in community clinics, in school clinics and within multi-purpose youth centres should be given a much clearer mandate to work towards the prevention of HIV/AIDS transmission among the young.

7.4 CONDOMS

'I think the government should provide my school with condoms, because if someone wants sex, the boys have to be ready with the condoms'

Given very high rates of HIV infection among adolescents in Botswana, condoms should be made available to all secondary school children. However, this must be done as part of an intensive, well-designed AIDS education programme, which places primary emphasis on abstinence and delay of sexual activity. Simply handing out condoms to students is not enough, and could well make matters worse. A condom dispenser should be installed in senior and junior secondary schools in a place where students will not feel intimidated (for example, the tuck shop or school counsellor's office).

7.5 PARENTAL INVOLVEMENT

'Youth are telling us that they want their parents to take more responsibility and talk to them about sexual matters. We must breakdown this cultural taboo… Parents have themselves got to be educated' Senior manager, NGO

'Parents in their homes should be provided with lessons about how they should talk to their children (about SRH issues)' Primary school teacher

'Parental resistance must be challenged and confronted.' Primary school head teacher

The G&C teacher(s) at each school must take the lead in ensuring that parents and guardians are well informed and, where necessary, educated about the objectives and content of all SRH education activities in the school. This should be done at every possible opportunity using all relevant media. Parents need to be convinced that the overall objective of the school is to protect children from becoming infected and that they, as parents, should be actively involved. Where appropriate, parents should be encouraged to observe and/or participate in SRH classes and other events.

Parent-teacher association meetings are an obvious venue, but attendance is poor at most schools. Individual meetings could be organised with some parents when they collect report cards (either on an individual or group basis). Specific activities during National AIDS Week should be organised that draw in and gain the support of parents.

AIDS counsellors and G&C teachers will also need to work with others in the wider community in order to improve parental understanding and appreciation of school-based SRH education. When necessary, this should be discussed at kgotla meetings and other public fora.

7.6 IMPROVED LIVELIHOODS

In Botswana, there is a strong link between poverty and HIV prevalence. In spite of the AIDS epidemic, transactional sex, particularly between young women and older men ('sugar daddies') appears to be pervasive and growing rapidly. While not all the girls and women who put themselves at risk in this way are poor, the evidence from Botswana and elsewhere strongly indicates that much of this activity is poverty-related. Consequently, without significant improvements in the livelihoods of the poor, AIDS education programmes (both in and out of school) may well have very limited impacts on sexual behaviour.

7.7 CREATING A SAFE ENVIRONMENT

Schoolchildren must be protected from rape and other unacceptable sexual relationships with adults. The following interventions are needed:

Transport should be arranged if there are any serious risks travelling to and from school. This is particularly important if students have to return home in the dark. If adequate transport arrangements cannot be made for these students, then they should be allowed to finish school earlier.
Decisive action is taken against all sexual harassment either by teaching staff or students (see Chapter 9).
AZT should be immediately prescribed for all rape victims.
A national campaign on sexual harassment and 'sugar daddies' should be mounted. A common understanding has to be developed within every community about what constitutes sexual harassment, why it is wrong, and what are the consequences. This, more than any school-based actions, would be the most effective deterrent to sexual harassment.

CHAPTER 8

STUDENT MITIGATION

This chapter focuses on what must be done to mitigate the impact of the epidemic on students, in particular those who are most directly affected. The discussion is structured around three broad questions. First, given the likely demographic and other impacts of the epidemic, how many children will need to be educated over the next decade? Second, what are the likely numbers of children who will be most seriously affected by the epidemic and whose education is, therefore, most threatened? And thirdly, what specific measures need to be taken in order to support these children?

8.1 PROJECTED SHOOL-AGED POPULATION

The key assumption that underpins the primary and secondary enrolment projections that are presented in the 8th National Development Plan (NDP8) is that 'population growth will continue to be high' (GoB, 1995: 357). Tragically, however, this will not be the case, as both infant, child and adult mortality rates increase and total fertility rates decline as a direct consequence of the AIDS epidemic.

With- and without-AIDS projections of the school-aged population in 1999 and 2010 are presented in Table 8.1. The 5-14 age group comprises the school-aged population for the ten years of universal basic education (seven years primary and three years CJSS). Without AIDS, this group would have increased to 521,000 by 2010. As a result of the AIDS epidemic, it is only projected to be 366,000, almost 30 percent lower. The 'with-AIDS' projection for 15-19 age group, from which senior secondary students are mainly drawn, is 9.5 percent smaller in 2010 than the 'no-AIDS' projection.[17]

Table 8.1: Projected 5-14 population - AIDS and no-AIDS scenarios, 1999 and 2010 ('000)

year		5 to 9			10 to 14			5 to 14			15-19		
		Female	Male	Total	Female	Male	Total	Female	Male		Female	Male	Total
1999	No AIDS	113	112	225	110	104	214	223	216	439	99	91	190
	AIDS	105	105	210	109	103	212	214	208	422	99	91	190

[17] Other projections estimate the decrease to be considerably less. The United States Bureau of Bureau projects the
5-14 population to be 390,000 in 2016, a decline of 10,000 (2.5 percent). The BIDPA study on the macroeconomic impacts of AIDS estimates that the 5-20 population will be 12 percent smaller than expected. However, the projected 1996 and 2001 prevalence rates that are used in the BIDPA modelling exercise are 2-3 times lower than the actual prevalence rates in 1996 and 1999 (latest year available).

2010	No AIDS	131	133	264	131	126	257	262	259	521	120	111	231
	AIDS	83	85	168	101	97	198	184	182	366	108	101	209

Source: AbT, 2000a

Population projections in other very high HIV prevalence countries have also estimated school-age population declines of similar orders of magnitude. For example, in Swaziland, it is estimated that there will be 30 percent fewer six-year olds in 2016 than the corresponding no-AIDS projection (see MoE, Government of Swaziland, 2000).

Not only will the 5-14 school-aged population will be much smaller than expected, but it will decline in absolute terms - from 422,000 in 1999 to 366,000 in 2010, a decline of 13.3 percent. It is essential, therefore, that new enrolment targets are established, which are based on these projected changes in the school-age population.

8.2 PROJECTED ENROLMENTS

The following discussion considers two alternative enrolment scenarios. First, what enrolment targets need to be established in order to achieve 10 years of universal basic education as well as the other objectives set out in the RNPE? The second scenario estimates projected enrolments on the assumption that intake rates to both primary school and CJSS will decline and repetition and dropout rates in all schools will increase as a direct result of HIV/AIDS.

8.2.1 RNPE enrolment targets

The two most important RNPE enrolment objectives are 10 years of basic education for all and a 50 percent transition rate from CJSS to senior secondary school. In modelling the target enrolments that will meet these objectives, the following assumptions have been made:

- 100 percent intake rate into Standard 1 by 2004/05
- The RNPE transition rate targets (100 percent from primary to CJSS and 50 percent from CJSS to senior secondary) are also achieved in 2004/05.

Two dropout and repetition scenarios have been assumed: dropout and repetition rates remain at 1997 levels (the latest year for which data is available) until 2010; and both these rates decline steadily to zero by 2004/05. Thereafter, all children will complete ten years of education without any repetition.

Table 8.2 shows the RNPE target enrolments for the three schooling cycles (primary, CJSS and senior secondary) over the ten-year period, 2000/01 to 2009/10. Assuming no change in dropout and repetition rates, by the end of the decade, target enrolments for primary schooling are 10 percent lower than current levels, but enrolments for junior and senior secondary education will have to increase by 17.4 percent and 23.5 percent respectively.

If all student dropout and repetition during the ten years of basic education could be eliminated by 2004/05, then target enrolments for primary education are 308,000(only five percent lower than the current level), CJSS 151,000 (a sizeable 31.3 percent increase), and senior secondary 48,000 (a 41 percent increase). Total school enrolments would be 7.4 percent higher than in 1999/00.

Table 8.2: Projected enrolments 1999/00 - 2009/10 ('000)

YEAR	PRIMARY			CJSS			SENIOR SECONDARY		
	RNPE targets	Zero drop	Drop x2	RNPE targets	Zero drop	Drop x2	RNPE targets	Zero drop	
1999	342	324	324	115	115	115	34	34	34
2000	331	332	328	115	115	114	35	34	35
2001	335	338	328	117	118	114	35	35	35
2002	337	342	324	120	122	113	35	36	35
2003	338	346	319	123	126	111	36	37	34
2004	336	348	312	126	132	109	37	39	34
2005	330	347	305	128	135	106	39	41	34
2006	325	341	296	132	142	105	40	43	33
2007	315	331	285	135	147	104	41	44	32
2008	304	321	274	137	151	104	41	46	33
2009	292	308	262	135	151	102	42	48	32

8.2.2 Lower intake - higher dropout and repetition

The large numbers of children in SSA whose lives will be directly and indirectly affected by HIV/AIDS will be less likely to attend school and achieve basic learning objectives. It is generally agreed, therefore, that the AIDS epidemic in high prevalence countries could result in much lower intake rates, (especially at the primary level) coupled with large increases in repetition and dropout rates.

In Botswana, the orphan population is projected to grow fivefold during the next decade (see below). The percentage of households living in poverty is also expected to increase by 6-8 percentage points by 2010 as a result of the AIDS epidemic. About one-quarter of all households will lose income as a result of an infected member. It is estimated that the average income of the poorest quartile of households will fall by 10-15 percent over the next 15 years (BIDPA, 2000). Households with orphans will be especially vulnerable.

It is impossible to make precise predictions about how parental loss and increased poverty will impact on enrolment and learning. However, based on the experience of other countries in SSA, the following scenario is quite plausible: over the next five years, the intake rate into primary school could fall to 95 percent, repetition and drop out rates right across primary and junior secondary schools could double, and the transition rate from primary school to CJSS could fall to 90 percent. Under this scenario, total enrolments in all three schooling cycles would be significantly lower in 2009/10 than they are now: primary minus 19.1 percent, CJSS minus 1.3 percent, and senior secondary minus 5.9 percent (see Table 8.2). After so many years of rapid enrolment growth, such an outcome hardly seems conceivable. But it is an outcome that has to be faced up to and prepared for.

8.3 CHILDREN MOST AFFECTED BY AIDS

There are three groups of children whose lives will be most affected by the epidemic: those who are themselves infected, children who have to care for parents and other household members who are ill, and children who lose parents. It is important to establish, therefore, the likely number of children in each of these three groups.

8.3.1 Children living with AIDS

The Ministry of Heath is currently piloting the use of ARTs among pregnant women as part of its Mother-to-Child Transmission (MTCT) prevention programme. Early results from the two pilot districts indicate that there are significant problems in getting all pregnant women to agree to and then comply fully with the necessary drug therapy regime. However, universal compliance would reduce MTCT by at least a half. This would mean that less than 0.4 percent of six-seven year olds enrolling in primary schools would be infected.

Around five percent of adults aged 15-50 are expected to have clinical AIDS by 2010 (see AbT, 2000). However, AIDS mortality among the 15-19 age group is projected to remain constant at 0.24 percent between 2000 and 2010. For the 10,000 or so school students who are over 19, AIDS mortality is projected to peak at 1.71 percent between 2004 and 2006 and fall slightly to 1.65 percent by 2010. Given RNPE projections and assuming that the current age profile of secondary students remains unchanged and that ARTs are not widely accessed, then the projected number of AIDS-related deaths among secondary students will increase from 424 in 1999 to 529 in 2005 and 558 in 2009 (see Table 8.3). At anyone time, therefore, around 600-850 secondary school students are likely to have clinical AIDS during this period.

Table 8.3: Projected number of AIDS-related deaths at secondary schools, 1999-2009

Year	Age	CJSS	Senior sec	
1999	**15-19**	248	62	310
	20-24	20	94	114
	Total	**268**	**156**	**424**
2005	**15-19**	288	74	362
	20-24	29	138	167
	Total	**317**	**212**	**529**
2009	**15-19**	304	80	384
	20-24	30	144	174
	Total	**334**	**224**	**558**

8.3.2 Children as carers

Total AIDS cases are projected to double from around 20-25,000 in 2000 to 45-50,000 in 2010 (AbT, 2000a). Without appropriate levels of support by adult carers, it is very likely, therefore, that many more children will become heavily involved in directly caring for the sick as well as undertaking household activities, which can no longer be performed by sick parents and other family members. Unless government adopts

comprehensive measures to reduce the household burden of care, repetition, dropout and absenteeism rates could increase significantly among these children.

HBCC senior management has recommended that volunteers should be paid a small allowance in recognition of the considerable time and physical and emotional effort needed to support terminally ill people. More youth should be involved.

8.3.3 Orphans

The AbT population projections indicate that there will be a four-fivefold increase in maternal orphans during the next decade (see Table 8.4). By 2010, maternal orphans will comprise between 31-42 percent of the 5-14 population. Hunter and Williamson estimate that there will be 205,000 orphans by 2010 (113,000 maternal and double and 92,000 paternal). On the basis of this wider definition, orphans will comprise 36.8 percent of all children below 15 (see Hunter and Williamson, 2000).

Table 8.4: Projected number of maternal orphans aged under 15 (nearest '000)

YEAR	0 TO 14		5 TO 14		population	
	Lower estimate	Higher estimate	Lower estimate	Higher estimate	Lower estimate	Higher estimate
1999	27	46	19	32	4.5	7.6
2005	100	138	na	Na	na	Na
2010	159	214	114	154	31.2	42

Further detailed demographic analysis is required in order to derive projections of the number of children who will have no effective parental care. Although 78 percent of the parents of children attending the survey schools are both alive, only 35 percent of children live with two parents.

Almost 50 percent of all households in Botswana are female-headed. Thus, given current and projected levels of HIV prevalence, around one-third of the children in these households will lose their mother over the next ten years and will have no effective parental care. Among the remaining households, at least 10-11 percent of children will become double-orphans, (although this percentage could much higher given the higher probability of cross-infection among spouses). It is possible, therefore, that 18-20 percent of all children will be double-orphans (both biological and social) by 2010.

Given the enormity of this orphan crisis, a critical issue is who will look after them? Detailed demographic projections need to made of the likely number of grandmothers and other relatives and adults who will be potentially available to look after orphaned children. According to the AbT projections, the ratio of infants and children (0-15) to adults aged over 50 is expected to fall significantly - from 3.24 in 1999 to 1.95 in 2010. In other words, there will be relatively more elderly carers potentially available than at present.

8.4 OVERALL GOVERNMENT POLICY

The epidemic will profoundly affect the lives of a large proportion of children in Botswana over the next 10-15 years. Supporting these children is the responsibility of the entire community working in close co-ordination with government and other organisations at the national and local level. To a large extent, therefore, the impact of the epidemic on the education sector will depend on the overall level and effectiveness of the assistance that is provided to affected children and their carers outside of school.

While schools should do a lot more to support affected children, it is equally clear that they cannot do everything. Some commentators believe that, given the seriousness of the AIDS crisis in large parts of Africa, schools must be transformed into altogether new types of institution that can provide comprehensive care and livelihood opportunities for very large numbers of children. This is particularly the case in countries where governments are unable to provide basic welfare and other benefits. Whether such an expanded vision of schools in the community is either desirable or feasible is an important issue. In Botswana, however, schools can continue to focus on their traditional educational activities because the burden of care for orphans and other affected children will be mainly shouldered by relatives and other helpers in the community with relatively high levels of material support from the state.

There are four main policy areas outside of education that have a particularly important bearing on the extent to which the epidemic will impact on the education sector itself. These are: poverty reduction, support for the sick and orphans, and child protection legislation.

8.4.1 Poverty reduction

In the medium to long term, achieving sizeable reductions in the overall level of poverty, particularly in the rural areas, is essential in order to combat both the causes and consequences of the AIDS epidemic. Improving the livelihoods of the poor is complex and must be based on a long-term strategy.

8.4.2 Support for the sick

Government must continue to take responsibility for meeting the basic needs of the terminally ill and those who care for them. Without this support, it is likely that children will have take on an increasing share of the burden of care, which will seriously affect their education.

The HBCC programme must also be properly staffed and resourced. On the assumption there will be 10,000 terminally sick patients in 2002, HBCC management estimates that a total of 3508 full-time personnel will be needed in order support the sick and their families[18]. AbT projections estimate that the number of AIDS cases will, in fact, be around 30,000 in 2002 which means that total staffing requirements will be 2-3 times this level.

8.4.3 Orphans

[18] The breakdown of staff is as follows 295 social workers, 1585 nurses, 1477 Family Welfare Educators and 151 medical officers.

The overall level and quality of support for orphans from government agencies as well as other non-governmental organisations during the next decade will profoundly affect how the AIDS epidemic impacts on the education system in Botswana. Many of these children are in danger of becoming seriously marginalised unless proper support is provided. In other high prevalence countries, the number of orphans who have become 'street children' engaging in high risk, anti-social activities (prostitution, drug taking, and crime) has grown exponentially and is at crisis levels in some countries. Once children take to the streets, it is very difficult to rehabilitate them. It is crucial, therefore, that decisive action is taken now in order to avert this situation in Botswana.

There is an on-going policy debate concerning the extent to which orphans should be treated as a separate category who are targeted for special support, both by MoEs and other government agencies. In many countries, targeted support for orphans has been both 'artificial' and 'difficult'. Other researchers argue that orphans do not have special needs mainly because 'even in a generalised epidemic, most African households will be able to adjust household size and dependency ratios in ways that make them similar to households that did not suffer a death' (World Bank, 1997:216). Accordingly, improving livelihoods in all poor households should be the overriding objective.

With regard to education policy, equity issues also feature prominently in this debate. A particular concern is that 'special measures to boost enrolment among orphans would neglect the needs of non-enrolled children who are not orphans' (ibid). However, this is much less of an issue in Botswana where nearly all children already go to school. Given the projected size of the orphan population coupled with their much greater vulnerability to dropping out of school, there is, therefore, a strong justification for targeting this particular group of children in Botswana.

A comprehensive and innovative policy framework must be developed to support orphans. Well-defined objectives and targets need to be established with respect to the following areas: community mobilisation based on effective inter-sectoral co-ordination, meeting basic needs, fostering and residential care, and child protection legislation.

Community mobilisation: Multi-sectoral Child Welfare Committees should be established throughout the country, both at the village and district level. These committees should be given the power, authority and resources that will enable them to mobilise effectively community efforts in support of orphans and ensure that the necessary government resources are available and properly utilised. Dedicated multi-disciplinary district teams of professional personnel should be responsible for programme implementation. MoE staff (especially AIDS Counsellors) must participate actively in both inter-sectoral committees and teams.

Meeting basic needs: With 30-40 percent of all children projected to be orphans by 2010, current levels of government funding will have to increase by least 5-6 fold over the next decade if the basic needs of orphans in difficult circumstances are to be adequately catered for[19]. School managers and teachers in all the survey schools believe

[19] There were 14,500 registered orphans out of an estimated total of 35,000 maternal orphans who were receiving assistance as part of the National Orphan Programme in mid-2000. With the number of maternal orphans projected to increase to between 150,000 and 215,000 by 2010 then, assuming the

that these children must be provided with food, clothing and, where necessary, shelter. A much-enlarged, dedicated cadre of social workers will also be needed to support orphans in difficult circumstances.

Fostering and residential care: GoB has recently approved new guidelines for the fostering of orphans. However, in view of the projected number of orphans, other forms of residential care will probably be required over the next 10-15 years. A large proportion of guardians will be unable and/or unwilling to provide the necessary supportive home environment for orphans. Consequently, community-based homes for orphans should be established, which will enable orphans to maintain close contacts with their relatives.

Child protection legislation: Child protection legislation must be firmly based on the principle that the interests of the child are paramount. Child abuse of any kind must, therefore, be dealt with decisively. To date, the interests of children have often been compromised by pervasive concerns about not wishing to upset traditional cultural beliefs and practices. If orphans and other children are seriously abused they should be removed immediately from the home and be accommodated in 'places of safety'.

8.5 EDUCATION POLICY AND PRACTICE

Most teachers do not feel that the MoE has an effective policy to support students who are affected by HIV/AIDS (see Table 8.5). The following discussion considers the key elements of a comprehensive policy framework that is required in this area.

Table 8.5: The Ministry of Education has an effective policy to deal with students who are affected by HIV/AIDS

	QUESTIONNAIRE			FOCUS GROUP		
	Not sure			Disagree	Not sure	Agree
TEACHERS						
Primary	36	40	20	18	73	9
CJSS	33	55	12	86	0	14
Senior sec	28	62	10	100	0	0

8.5.1 *Creating a supportive school environment*

Even without the AIDS epidemic, decisive action would still be needed to improve the school environment so that it is both more child-friendly and teacher-friendly. The AIDS crisis dramatically increases the urgency of addressing this fundamental weakness in the school system in Botswana. Without substantial improvement in this area, all HIV/AIDS prevention and mitigation policies are likely to founder.

School managers and teachers must become far more proactive in identifying students who are affected by HIV/AIDS and in supporting their learning needs. A lot more openness is needed if schools are to play an effective supportive role.

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overall incidence of need remains the same, then between 62,000 to 89,000 orphans will require food rations and other assistance by this date.

School survey: The majority of school managers, teachers and students at the survey schools are fully aware of the importance of creating a more supportive school environment: The following comments are typical of the concerns that were expressed in this area:

'We have got to organise ourselves into a supportive community'

'We must create an environment where students can approach teachers for help knowing that it will be given.'

'Schools are not dealing with the lack of parental care and love'.

'The school should take greater responsibility in caring for orphans, because they have greatest contact with these students and so know them better.'

'We need to counsel orphans, give them love, and build their self-esteem.'

Three areas were consistently singled out as being most important, namely orphan identification and referral and counselling (see below).

8.5.2 Specific interventions

A range of measures to support the educational needs of orphans and other children affected by the AIDS epidemic have been proposed for high prevalence countries. However, as yet, no systematic research has been undertaken on the actual effectiveness of different interventions. Despite this lack of evidence which can be drawn upon, it is clear that a range of concerted, co-ordinated actions will be needed in Botswana in order to make schools both child-friendly and orphan-friendly. The remainder of this chapter will assess the potential contribution of the following interventions in meeting these related objectives:

- advocacy
- children living with AIDS
- management and teacher training
- student needs assessment and monitoring
- student referrals
- student counselling services;
- school meals and other school-based material support
- involvement of guardians and carers
- school participation in community-wide orphan support programmes
- income-generation opportunities
- free education
- compulsory education

Advocacy: The MoE must do all that it possibly can to ensure that the material and emotional needs of orphans and other children directly affected by AIDS are adequately met. Failure to do so will mean that many of these children are unlikely to complete ten years of basic education and achieve the key learning objectives that are enshrined in the RNPE. Managers at all levels in the MoE (national, regional, school)

must therefore play an active advocacy role throughout government and the country at large in ensuring that these needs are met. The MoE should also be centrally involved in the identification, design, and monitoring of all policy interventions throughout government, which directly and indirectly affect school attendance and performance among children directly affected by AIDS. Research in this area is, therefore, a top priority.

Children living with AIDS: The MoE should establish clear policy guidelines for schools on children living with AIDS. As is the case now, schools will generally not know for certain the HIV status of persistently sick children. However, it is important to ensure that these children are properly supported and, in particular, are not discriminated against by either students or staff. Obvious precautions also need to be taken to prevent infection among children and staff at schools, in particular the steps that should be taken to deal with cuts and other blood injuries in the playground and from sports activities (use of rubber gloves, disinfectant). Most schools already take these precautions.

Management and teacher training: Intensive pre- and in-service training programmes are needed in order to improve the overall quality of school management and promote the required changes in teacher attitudes and behaviour. Some of this training is already being carried out. In particular, the PSMD project has targeted improvements in the school environment and inter-personal relations as a top priority. However, much more needs to be done.

Time, resources and incentives: Teaching staff do not have sufficient time, resources, and incentives to be able to support students properly. Most already feel heavily over-burdened by a crowded curriculum and other work-related commitments. Merely exhorting teachers to be more supportive will achieve very little. Consequently, it is essential that the right enabling environment is created so that teaching staff can perform this key function effectively. In particular, there should be much stronger incentives for school managers and teachers to devote the necessary time and effort to supporting students. This may entail changes in the job descriptions of school managers and teachers.

Needs assessment and monitoring: Quite simply, 'we must keep close track of orphans.' At the very least every school should undertake a simple needs assessment. In view of the seriousness of the AIDS epidemic in Botswana, schools should regularly collect basic information on the home situation of every student. It is recommended that a standardised form is developed and that class teachers/tutors in both primary and secondary schools personally interview every student as soon as possible after the start of the school year.

In close collaboration with S&CD, the home situation of students should also be closely and regularly monitored. S&CD should inform schools immediately about children who are in especially difficult circumstances. Schools should follow-up promptly students who are repeatedly absent. Much better use should also be made of the time that is already allocated for pastoral

Student referrals: All students who require assistance from S&CD and other support organisations should be referred promptly by schools. All referrals should be quickly followed-up in order to ensure that appropriate action has been taken.

Support: It is also recommended that specially designated social workers be formally assigned to work with clusters of schools in every locality. However, Guidance and Counselling teachers should provide the bulk of school-based support for children affected by AIDS.

Free schooling: Given the already high incidence of poverty in the country coupled with the likely impacts of the AIDS epidemic, the introduction of any cost recovery measures for primary and secondary schooling could seriously affect intake and dropout rates. Basic education should, therefore, remain free.

Compulsory education: Many would argue that GoB now has the resources and authority to make education compulsory for ten years. In view of the expected increase in the orphan population, the benefits of compulsory education are likely to outweigh the costs of enforcing such a policy. There are some concerns that, where guardian commitment to education is low, compelling them to send children to school could be counter-productive. However, children have a fundamental right to education. When a country has the educational capacity to ensure that all children can be educated, the continued violation of this right is not acceptable. There is a small group of children who live in particularly remote areas and/or whose families pursue nomadic and semi-nomadic livelihoods where it will not be possible to enforce compulsory education.

School meals: *'Orphans should be fed in schools so that they eat healthy food.'* As discussed earlier, the provision of a free school meal(s) is not only important in ensuring that at least some of the nutritional needs of children are met, but it provides a major incentive for orphans and other disadvantaged children to attend school. It is recommended therefore that all schools should provide orphans in difficult circumstances and other needy children with two nutritious meals a day. Serious consideration should also be given to re-directing some of S&CD orphan food rations to schools. More generally, the quality of meals particularly at primary schools should be significantly improved.

Boarding facilities: 'Where necessary, orphans should become boarders so we can take care of their material needs'. Where orphans cannot be properly cared for by relatives and foster parents cannot be found, schools could take responsibility for looking after them. Where schools already have boarding facilities, this should not pose serious problems. Being a boarder carries none of the stigma of orphanages and other residential homes and is more likely, therefore, to be a more acceptable alternative for most relatives.

Medical care: The School Health Programme needs to be considerably strengthened in both primary and secondary schools. Teaching staff and other interviewees made a number of interesting suggestions. These included the establishment of school clinics in large schools, dedicated school nurses supporting the medical needs of children in clusters of schools, and employing qualified nurses as matrons in (secondary) boarding

schools. At the very least, nurses and FWEs should visit schools far more frequently than they are able to do at present. The proposed development of youth-friendly clinics should, however, lead to significant improvements in the up-take of medical services (particularly for STD treatment) and SRH information by children and youth.[20]

Involvement of guardians and other carers: It is widely agreed that schools should make special efforts to meet with the carers of orphans. Every encouragement should be given to carers for them to attend meetings at the school, but it may also be necessary for teaching staff to visit carers in their homes.

School participation in community-based support programmes: 'The school and the local council should work closely together to support the orphaned students. Councils should inform schools about such students.' The participation of most schools managers and teachers in community-level committees and other structures that have been established in order to deal with the AIDS crisis has been generally limited. This must change as a matter of priority. Not only are schools key institutions in the community, but school managers will not be in a position to support properly orphans and other affected children unless they are fully informed about and involved in the activities of these bodies. The District Multi-Sectoral AIDS Committee (DMSACs) and Inter-Sectoral Child Welfare Committees are particularly important structures.

Income generation opportunities: Some interview and questionnaire respondents recommended that schools should take the lead in promoting both school-based and out-of-school income-generating opportunities for orphans. However, worldwide, schools have a poor track record in undertaking activities of this kind and many would argue that extending the role of the school in this way is not appropriate in the Botswana context.

School dates and times: Elsewhere in SSA, it has been suggested that the length of the school day should be shortened in order to accommodate the needs of children directly affected by AIDS. However, this did not emerge as an important issue in the school survey, particularly in primary schools where lessons finish at lunchtime.

Support for out-of-school children and youth: Through the provision of vocational education and training and non-formal education, the MoE has a major role to play in supporting out-of-school youth and youth in general who will be directly affected by the AIDS epidemic. It is particularly important that the skills training provided by DVET is integrated with other key services, (including micro-finance) that will enable affected youth to improve their livelihoods.

Students as carers: Given that the role of students as carers is not generally perceived to be a serious problem in most schools, school managers and teachers had little or nothing to say about what should be done in the future to support these children. As note earlier, responsibility for caring for the sick is seen to lie with adult relatives with support from a well-resourced HBCC programme. A small minority of teachers did indicate, however, that students should be trained at school about how to look after AIDS patients.

[20] It has recently been announced that 500 nurses in Botswana have been recruited to work in hospitals in the UK. Clearly, such high levels of migration poses a serious threat to the ability of the health services to respond effectively to the AIDS crisis.

CHAPTER 9

TEACHERS AND OTHER STAFF: PREVENTION AND MITIGATION

This chapter discusses what should be done to most effectively mitigate the impact of HIV/AIDS on teaching and support staff in the public education sector over the next 10-15 years. The key overarching recommendation is that a comprehensive 'AIDS in the workplace' strategy for all MoE personnel should be designed and implemented as soon as possible. With well over 1000 schools and other 'workplaces' (support departments, colleges of education, regional offices etc), this is a formidable challenge, which will require very high levels of management commitment and expertise and has sizeable resource implications.

The other key issue that must be addressed is, given projected lower enrolments and higher rates of teacher mortality, what are projected teacher requirements and related recruitment targets for the next ten years. This will allow an assessment to be made of the adequacy of current and planned outputs of teachers from the six colleges of education.

9.1 AN 'AIDS IN THE WORKPLACE' STRATEGY

The primary target group for an AIWP strategy is teaching staff in schools who account for over 85 percent of total employment in the MoE. The twin objectives of this strategy are to prevent further HIV infection and create a supportive environment for all staff, both those who are living with AIDS and those who are not. As a key national resource, there is an especially strong case for taking all possible steps to safeguard teaching staff from the impact of the AIDS epidemic. However, targeting any group for special assistance using public resources also raises important moral and ethical issues, which must be very carefully considered before any interventions are made.

The following discussion outlines the main activities that must be incorporated into a comprehensive AIWP strategy.

9.1.1 Prevalence and risk assessment

It is absolutely essential that a comprehensive assessment of HIV prevalence and risk among teachers and support staff is undertaken as soon as possible. This is not only indispensable for planning purposes, but also in designing effective prevention programmes. In particular, it will enable staff with relatively high prevalence rates and/or risk profiles to be targeted as part of the HIV/AIDS prevention programme. The likely margins of error of projections that simply assume that teaching staff have the same prevalence rate profile as the rest of the adult population are likely to be very large and thus of little practical value. Exact prevalence rates must, therefore, be

ascertained for a well-constructed sample of teachers and support staff in order to make accurate projections of teacher requirements over the next 10-15 years.

Two types of information are required. First, teachers at randomly selected schools should be requested to participate in a voluntary, anonymous testing programme. Staff will be required to provide a saliva specimen. The only information that needs to be collected is the age and gender of the staff member and type and location (district) of the school. A reputable organisation with proven expertise in conducting tests of this kind should be contracted to conduct this survey[21]. The overall findings of the survey should be made public and head teachers should meet with their staff to discuss and what they mean for them as a school and as individuals.

The reasons for this voluntary testing programme will need to be very carefully explained to teachers and teacher organisations. It is essential that most sampled teachers are willing to provide a saliva specimen. Otherwise the results will too biased to be of much value.

Secondly, a Knowledge, Attitudes, and Practices (KAP) survey should be undertaken in order to identify the extent to which teachers and other staff are at risk from HIV infection. Again, this survey should be contracted out to an organisation with the appropriate expertise in conducting sensitive survey work of this kind. Given the gender profile of teaching staff, the majority of interviewers should be women.

9.1.2 Education and prevention

'The Ministry of Education must spread the gospel of HIV/AIDS' (Primary school Head teacher, Kweneng District).

It is recommended that the MoE should mount an intensive education and prevention programme for all teaching and support staff as soon as possible. The main objectives of this programme are to:

- Confront the silence, denial, and secrecy about HIV/AIDS, which pervades the teaching community and to create in its place a culture of openness and acceptance.
- Provide information and appropriate life skills training that will prevent infection.
- Ensure easy access to contraceptives in every school.
- Highlight the benefits of testing.
- Counter discrimination.
- Encourage supportive behaviour for colleagues who are infected and sick.

Guidance and counselling teachers, acting as peer educators, should have overall responsibility for HIV/AIDS education for all staff at primary and secondary schools. Regular staff meetings should be also convened (at least one per month) in order to discuss all aspects of AIDS prevention and mitigation for both staff and students.

Critical to the success of the programme will be the dissemination of a comprehensive set of multi-media learning materials. This includes a Teacher's Handbook on HIV/AIDS (which should be distributed to every school manager and teacher), and other written

[21] Properly conducted HIV testing using saliva and urine samples is over 95 percent reliable.

material (posters, booklets, and leaflets), and video and audio-cassettes on specific topics.
Wherever possible, material that has been developed by other organisations in Botswana and elsewhere should be used in order to keep production costs to a minimum and ensure rapid dissemination.

9.1.3 Testing and disclosure

'Testing must be free with pre- and post-counselling. Each individual should know that they are at liberty to have a test. It is only with the knowledge of ones STATUS that one can consider ABC' (CJSS teacher, North East District).

'Those who are infected need to tell others so that they can comfort them and help them when the need arises' (Senior secondary school teacher, Francistown)

Teacher attitudes to testing were not fully explored in individual and interview discussions. However, comprehensive voluntary testing with professional pre- and post-test counselling is essential for both effective prevention and mitigation of HIV/AIDS.[22] The MoE should do all it can, therefore, to encourage teaching staff to test for HIV.

GoB is in the process of establishing testing and counselling centres throughout the country. There is no need, therefore, for the MoE to establish its own testing programme. However, there must be sufficiently strong incentives for staff to test. The most important incentive is the knowledge that if one tests positive, the necessary anti-retroviral drug therapies will be available (see below).

With appropriate education and training, infected teachers will be increasingly prepared to divulge their status, knowing that their colleagues will do all they can do support them, both emotionally and professionally. Teachers who have disclosed their HIV status should be extensively used as peer educators in order to encourage other colleagues to test.

9.1.4 Counselling and support groups

'Each school should have an office where students and teachers can go for proper counselling' Junior secondary school teacher, Kweneng District

It is very important that teachers and other staff are able to access high quality counselling support and be assured of total confidentiality. Experience from the private sector clear shows that it is not possible to implement an effective AIWP without properly trained, full time AIDS counsellors in the workplace. It is recommended, therefore, that the MoE employs a group of AIDS counsellors who can make regular visits to schools to meet with staff both individually and in groups. [23] An AIDS

[22] In the Uganda study, 75 percent of teacher respondents indicated that they would be prepared to be tested. Testing has been central to the success in Uganda of combating AIDS. The Uganda AIDS Counseling Centre tested and counseled 350,000 people during the 1990s.
[23] There are 25,000 staff in the MoE deployed in over 1000 establishments. The average numbers of teaching staff in primary, CJSS, and senior secondary schools were around 16, 27 and 61 respectively in 1999.

counsellor should visit each school at least twice a term. Given travel time and other professional responsibilities, this would mean that each Counsellor could provide counselling services to teaching and support staff in 25-30 schools as well as assist each school management team to implement the Ministry's AIWP strategy. With nearly 1000 schools in Botswana, it will be necessary, therefore, to recruit and train at least 40 AIDS Counsellors who should be deployed to the Departments of Primary and Secondary Education in the regions.

An alternative arrangement would be for Guidance and Counselling teachers to be given responsibility for providing confidential counselling services to all staff in their schools. However, given the relatively small number of staff in most schools and the nature of social relations between teachers and between teachers and school managers, it seems unlikely that most G&C teachers will be able to establish sufficient professional credibility to perform this function effectively.

It is also recommended that living positively support groups be established for teaching staff in each district.

9.1.5 Deployment and transfers

In such a large country as Botswana with a widely scattered population, teacher deployment will always be difficult. The majority of primary school teachers are relatively young, female, and single. While it may be the case that they are at greater risk of becoming infected if they are working at schools in rural and other remote locations, the MoE must continue to staff these schools. Thus, it is only through intensive education and support that teachers 'at risk' can be encouraged to act responsibly and desist from behaviours that are likely to lead to infection.

It is obviously important that AIDS-related transfer requests from teachers should continue to be dealt with sympathetically and, where there is an obvious need for a teacher to be re-deployed, this should be done as quickly as possible. It is clearly in the best interests of the teacher and the ministry that sick teachers are properly cared for. However, with appropriate support from school managers, it should be possible for the majority of sick teachers at rural schools to travel to urban centres in order to receive medical treatment. Whenever necessary, they should be given time-off to make these visits.

In view of the increasingly serious deployment constraints that are likely to arise as the AIDS crisis deepens, additional teaching staff will be required in order to ensure that all schools are properly staffed (see 9.2 below). In particular, schools that have sick teachers should be provided with extra teaching cover. As a matter of principle, it is important that no one group of schools (either remote, rural, nor urban) is disproportionately affected as a result of the AIDS epidemic.

It is clear that there is currently very little information available that would allow senior managers and planners to monitor the overall deployment and related movements of teaching staff in the context of the HIV/AIDS epidemic. It is recommended therefore that an information system is established immediately, which will provide

comprehensive up-to-date information on deployment and transfers. This will enable detailed assessments to be made on a regular basis about how staff deployment is being affected by the epidemic. It is also recommended that a study is undertaken on the extent of spouse separation among MoE staff and the extent to which this is contributing to the HIV/AIDS epidemic.

9.1.6 Sickness and absenteeism

As discussed earlier, denial, secrecy and a strong sense of professional commitment result in most affected teachers refusing to take long-term sick leave. Many continue to come to school when it is clear that they cannot cope with a full teaching load. When head teachers are unable to recruit a temporary replacement teacher, they also have a strong incentive (at least in the short term) to keep sick teachers in school.

It is recommended that new personnel policies and practices are introduced that can deal effectively with the consequences of rising levels of AIDS-related illness among teaching and other MoE staff. New sickness regulations must carefully balance both individual and institutional needs. While sick teaching staff must not be discriminated against in any way, the MoE has a duty to take all necessary steps in order to prevent any serious deterioration in teaching and learning that may occur as a result of higher levels of staff morbidity.

The following actions are recommended:

- Once it is clear, that a teacher is no longer able to work properly, a Head teacher should be able to call immediately on the services of a qualified replacement teacher. It will be necessary, therefore, to establish a new cadre of 'supply teachers' who can be quickly deployed to all schools, which require additional teaching support. Current shortages of qualified teachers will make it difficult to develop a cadre of locum teachers immediately. Expatriate teachers could however be employed as an interim measure.

- The workload of sick staff should be reduced to appropriate levels. However, in the school context, the possibility of re-assignment of sick staff to other 'lighter', non-teaching duties' is often quite limited.

- In a more open and supportive school environment, sick teachers will feel less tortured about being absent from school and will be more prepared to take long term sick leave if this is necessary. However, head teachers in consultation with their senior education officers and regional management should be far more proactive in dealing with sick staff. Where it is clear that a sick teacher is not coping and is persistently absent, they should receive proper counselling and be encouraged to go on long term sick leave. If they refuse, they should be required to go before a properly constituted Medical Board, which will recommend the best course of action.

Other sick leave and retirement regulations should remain unchanged.

9.1.7 Medical aid

Given the scale and nature of the epidemic, it is crucial that all teaching and support staff receive high quality medical care. Increasing teacher membership of BPOMAS is, therefore, a key objective. Two types of co-ordinated action will be needed in order to achieve this. First, the MoE should mount an intensive information and education campaign, which publicises the benefits of belonging to the government medical aid scheme. It is very unlikely that double and triple combination ARTs therapies will be freely available through the public health service in the near future. Consequently, teaching staff should be made fully aware of their current, relatively generous entitlements to these drug therapies.

Secondly, the financial burden of individual medical aid contributions for teachers and other staff on lower grades should be reduced. This could be done on a permanent basis or, at the very least, as a temporary measure during the duration of the epidemic. More research needs to be done, but limiting individual contributions to a maximum of 5-6 percent of total salary for primary school teachers and 9-10 percent for secondary school teachers would probably lead to a very large increase in membership. As an emergency measure, the MoE would have to make up the financial shortfall between current and proposed contribution levels. A detailed cost-benefit analysis should be undertaken in order to establish the overall cost-effectiveness of this policy. However, if ARTs drug therapies lead to much lower levels of morbidity and mortality, the rate of return to this intervention is likely to be very high.

Another possibility would be to reduce the level of financial contributions for lower paid staff, but at the same time make BPOMAS membership compulsory for all MoE staff for at least the duration of the epidemic. This would be similar to compulsory 'national insurance' contributions, which are common place in high- and middle-income countries.

It is recommended that a survey of teaching staff is undertaken in order to find out why BPOMAS membership is so low, particularly among primary school teachers.

9.1.8 Anti-retroviral drug therapies

As discussed earlier, with proper medical support and high levels of patient compliance, the mass provision of ARTs to all infected teaching staff would be the single most effective intervention to mitigate the impact of the HIV/AIDS on the education sector. On the basis of the few evaluations that have been undertaken, morbidity and mortality rates could be at least halved. Unlike most other countries in sub-Saharan Africa, Botswana has sufficient public financial resources and the necessary medical infrastructure to consider seriously the possibility of making these drugs available to all teaching staff.

Only a very small proportion of teachers among those who are likely to be infected is currently taking anti-retroviral drugs. Even assuming that prevalence rates among teaching staff are half the national average, only around four percent of infected teachers who belonged to BPOMAS (and who, therefore, are already entitled to ARTs treatment) were benefiting from these drugs in mid-2000. Among the remaining staff, who are not covered by medical aid, this percentage is likely to negligible. This highlights the importance of providing all teaching staff with comprehensive information on these drug therapies and the need to test for HIV.

The provision of ARTs as part of a comprehensive medical aid scheme is probably preferable to a separate, ad hoc programme for the provision of these drugs. Some would argue that it is not, in fact, feasible to dispense these drugs on a large scale unless recipients are members of a medical aid scheme. However, separate provision with reliance on strengthened public health services may be a more cost-effective alternative.

Once prevalence levels have been established among teaching staff, it will be possible to make reasonably accurate estimates of the total cost of making ARTs available to all those who need these drugs. Medical experience to date indicates that ARTs should not be prescribed until an individual's CD4 count is below 200 and the immune system starts to become susceptible to AIDS-related opportunistic illnesses. This usually occurs some 6-7 years after infection.

GoB has announced that some ARTs will be made freely available to the entire population in early 2001, although no details have yet been made public. This clearly has important implications for MoE staff and, in particular, their incentives to join BPOMAS. However, given that that only mono drug therapies are likely to be on offer, teaching staff will still have a strong incentive to access double and triple combination ARTs therapies as part of BPOMAS's high benefit scheme.

9.1.9 Nutritional advice

'Nutrition is one of the single most important things a person with HIV can do to improve the quality of their lives and change their viral load' (BOMAID, 2000). The energy needs of a person with HIV increase by 20 percent and HIV causes numerous vitamin deficiencies. Infected individuals also need to eat food that is high in anti-oxidants in order to reduce the level of damaging free radicals in the body. The AIWP programme should, therefore, provide comprehensive information on nutrition to all teaching and support staff.

9.1.10 Sexual misconduct

The MoE should take decisive action to deal with the widespread incidence of sexual relationships between male teachers and female students at CJSS and senior secondary schools. A much broader policy initiative is also required in order to stamp out the 'sugar daddy' phenomenon.

The following coordinated interventions should be considered:

- A concerted education campaign among teacher trainees and serving teachers as well as mid-late adolescent female students.
- Much greater management commitment and competence among headteachers and SEOs in dealing with alleged cases of sexual impropriety among teaching staff.
- Advocate for a blanket legal prohibition on all sexual relationships between adults and children below the age of 18.

- Advocate for the reduction of the legal burden of proof so that it is easier to take adults who are suspected of having sexual relationships with children to court and obtain convictions.

- Significantly increasing the legal penalties for teachers who are found guilty of having sexual relations with anyone who is under 18 and also any student over 18 at the school at which they teach. This should also cover other individuals in 'positions of responsibility' and/or have a professional 'duty of care' (police, doctors, social workers).

- When serious allegations of sexual impropriety arise, the teacher involved should be immediately suspended from teaching duties and legally forbidden from contacting either the girl with whom he is alleged to have had sexual relations or her parents/guardians.

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9.1.11 Staff development

Teachers: The HIV/AIDS epidemic could adversely affect the longer-term objective of ensuring that all serving teachers up-grade their professional qualifications to the diploma level. Increased teacher morbidity and mortality will, without appropriate interventions, make it considerably more difficult for teachers to be released on study leave. Increased workloads and generally lower morale could also adversely affect the extent to which teachers are able to study on the job.

An ambitious distance education diploma programme for serving primary teachers was started in early 2000. Total enrolment is planned to increase to 2,350 for the four-year course by 2003. However, capacity constraints at the host institution, the Centre for Continuing Education at the University of Botswana, are likely to keep enrolments at around 1800. Enrolment in mid-2000 was only 600. With up to 20-25 percent of all eligible primary teachers studying in their spare time and holidays, this will put a lot of additional strain on both teachers and schools. Again, realistic staffing norms need to be established that will enable these teachers to study effectively.

Managers: All head teachers and other members of the school management team should receive intensive training in AIWP issues. It is recommended that all head teachers and Guidance and Counselling teachers attend a two-day workshop every year, which focuses explicitly on achieving AIWP objectives in every primary and secondary school. Given that the MoE does not have the required AIWP training capacity in-house, responsibility for the design and delivery of this training programme should be contracted out to an appropriate organisation.

9.1.12 Teacher organisations

Teacher unions must be centrally involved in the design and implementation of AIWP policies in schools and other MoE institutions. The 'Teachers Against AIDS' organisation should be revamped and actively supported by both the MoE and teacher unions.

9.2 TEACHER REQUIREMENTS AND RECRUITMENT TARGETS

The likely negative impacts of HIV/AIDS on both overall enrolments and staff morbidity and mortality heightens the importance of deriving robust and detailed projections of total teacher requirements and related recruitment targets for each of the three schooling cycles during the next 10-15 years. Projections that have been made for other countries indicate that teacher recruitment will have to be expanded rapidly in order to make up for higher levels of AIDS-related attrition. It is widely believed that this will also be the case in Botswana.

9.2.1 Projected teacher attrition

AbT projections have estimated projections of AIDS-related mortality rates for each age cohort for the 15-59 adult population for the period 2000 to 2010. Given the current age profile of teachers, these can be used to calculate projected mortality rates among teachers for the same period. If it is assumed that HIV prevalence and mortality are the same for teachers as for the adult population as a whole, then projected annual mortality rates will increase to 5.6 percent for primary and 7.6 percent for secondary teachers by 2010 (see Table 9.1). This is 6.7 times the overall mortality rate among primary school teaching staff in 1999/2000 and 34.5 times the current level for secondary school teachers. Mortality rates of this magnitude would have a very significant impact on teacher supply.

Table 9.1: Projected AIDS-related mortality for primary and secondary school teachers, 2005 and 2010 (deaths/000)

	Same mortality rates as adult population		**1999/200 teacher-adult mortality differentials**	
	2005	2010	2005	2010
Primary	46	56	26	28
Secondary	58	76	7	10

However, if the AIDS-related mortality differentials between teachers and the adult population that prevailed in 1999/2000 persist over the next ten years, then projected annual teacher mortality will be much lower - 2.8 percent among primary and 1.0 percent among secondary teachers in 2010. While these levels of mortality are tragic, they do not pose a serious threat to the education system in Botswana. Furthermore, with an effective AIWP programme (in particular, widespread testing and availability of ARTs), these mortality rates could be much lower still (see below).

9.2.2 Modelling assumptions and scenarios

The total teacher requirement for each type of schooling is equal to projected total annual enrolments divided by the target student/teacher ratio. The target levels of recruitment that are needed in order to ensure that projected teacher requirements are met will depend on the following factors:

Growth in teacher requirements. Where enrolments are decreasing, this growth is obviously negative.

Replacement of teachers as a result of attrition. Three attrition scenarios have been adopted. The first assumes that HIV prevalence and AIDS-related mortality rates among teachers will be the same for the population as a whole. The second assumes that teacher mortality is 50 percent of national AIDS-related mortality rates. The third scenario assumes that this level of mortality can be reduced by a half as a result of the availability of ARTs and the successful implementation of comprehensive AIWP.

AbT projections of AIDS deaths among the 20-64 adult population for the period 2000-2010 have been used to calculate these attrition rates (see Table 9.2). The rate of attrition from other causes (non-AIDS deaths, resignations, redeployment etc) is assumed to remain unchanged at current levels. Lower teacher morale and better opportunities to move to 'greener pastures' (as a result of increasing AIDS-related labour shortages elsewhere in the economy) could lead to higher resignation rates. However, only graduate teachers working in senior schools have marketable skills in the wider labour market. Furthermore, much improved pay and conditions of service among primary school teachers who upgrade their qualifications will help to keep resignations down.

Cover for sick teaching staff. New staffing norms should be established in order that proper cover can be provided for sick teachers. This requires annual projections of the numbers of sick teachers working in the three types of school and annual estimates of the average number of days that they will be off sick between 2000 and 2010.

The number of teaching staff who will have AIDS during the period 2000-2010 are based on AbT projections for the 20-65 adult population (see Table 9.2). Again, the same three mortality scenarios are employed. It is assumed that average life expectancy after the onset of clinical AIDS is one year and that sick teachers will, on average, be absent from school for half this period.

Table 9.2: Projected AIDS cases and AIDS deaths as % of adult population, 1999-2010

		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Adult AIDS cases as % of adults 15-59	High	1.95	2.32	2.7	3.08	3.44	3.78	4.09	4.36	4.59	4.77	4.92	5.03
	Low	1.62	1.95	2.3	2.64	2.98	3.3	3.58	3.83	4.03	4.2	4.32	4.41
Adult AIDS deaths as % of adults 20-64	High	1.34	1.59	1.84	2.1	2.34	2.56	2.77	2.94	3.09	3.2	3.3	3.37
	Low	1.21	1.43	1.66	1.89	2.11	2.31	2.48	2.63	2.75	2.84	2.91	2.96

Source: AbT, 2000a

Replacement of untrained and foreign teaching staff. . Both of these are relatively sizeable groups in Botswana. Much lower HIV prevalence among foreign teachers (because of pre-employment testing) means that the secondary school system is, to some extent, protected from the impact of HIV/AIDS on the teaching force. The up-grading of all primary school teachers to the diploma level and the replacement of

untrained teachers is a key long term objective. While no explicit targets have been set, the complete localisation of teaching staff is eventually expected. It is important, therefore, to assess how the AIDS epidemic will affect both these objectives. Generally speaking, the higher the rates of overall growth in teacher requirements and attrition, the harder it will be to attain either of these objectives.

9.3 PRIMARY EDUCATION

The attainment of the RNPE student: teacher ratio of 30:1 for primary education has been deferred until the end of NDP9 in 2009. However, with 10764 primary school teachers teaching 324,000 students in 2000, this ratio is already 30:1.

Table 9.3: Primary school teacher requirement and recruitment targets, 2000-2009

SCENARIO 1: RNPE TARGETS

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
GROWTH	215	138	62	34	-52	-105	-267	-331	-367	-400	-1073
AIDS DEATHS											
20-64 unadjusted	214	256	291	325	357	387	400	408	404	398	3440
50% 20-64 unadjusted	107	128	146	163	179	194	200	204	202	199	1720
25% 20-64 unadjusted	54	64	73	81	89	97	100	102	101	100	860
OTHER ATTRITION	220	223	224	224	223	221	216	209	202	194	2156
COVER FOR SICK TEACHERS											
20-64 unadjusted	138	29	29	23	16	36	5	7	10	-2	291
50% 20-64 unadjusted	69	25	14	12	7	19	2	3	6	-1	146
25% 20-64 unadjusted	34	8	7	7	4	9	1	3	2	0	73
RECRUITMENT TARGETS											
20-64 unadjusted	787	646	606	606	544	539	354	293	249	190	4814
50% 20-64 unadjusted	611	514	445	433	357	329	151	85	43	-8	2959
25% 20-64 unadjusted	503	440	374	355	276	228	64	-5	-49	-92	2093

SCENARIO 2: LOWER INTAKE-HIGHER DROP-OUT AND REPETITION

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
GROWTH	129	-18	-137	-155	-219	-233	-319	-341	-380	-390	-2063
AIDS DEATH											
20-64 unadjusted	213	250	279	307	332	355	363	370	364	357	3190
50% 20-64 unadjusted	107	125	140	154	166	178	182	185	182	179	1595
25% 20-64 unadjusted	53	63	70	77	83	89	91	93	91	89	798
OTHER ATTRITION	218	218	215	212	207	203	196	190	182	174	2015
COVER FOR SICK TEACHERS											
20-64 unadjusted	136	27	25	19	11	30	2	6	8	-3	261
50% 20-64 unadjusted	68	14	8	10	5	15	1	3	4	-1	127
25% 20-64 unadjusted	34	7	6	5	3	7	1	1	2	-1	65
RECRUITMENT TARGETS											
20-64 unadjusted	696	477	382	383	331	355	242	225	174	138	3403

50% 20-64 unadjusted	522	339	225	220	159	162	60	37	-12	-38	1674
25% 20-64 unadjusted	434	269	154	139	74	66	-31	-58	-105	-128	814

Scenario 1 - RNPE targets: Table 9.3 shows that, as a result of declining primary school enrolments from 2004 onwards, total teacher requirements also begin to fall thereafter. However, target recruitment levels (with no phasing out of untrained teachers) vary enormously across the three mortality scenarios. Under the lowest mortality scenario, only 2093 teachers will need to be trained between 2000/01 and 2009/10. If the planned intake into the colleges of education is maintained at the proposed level of 720 per annum until 2007[24], the total output of trained teachers will be in the region of 6,500 (assuming 95 percent completion rates). If the 1,123 untrained primary teachers who are currently employed are replaced and ten percent of places continue to be reserved for the up grading of serving teachers, there will still be an excess supply of approximately 2700 graduates. According to this particular projection scenario, by 2009/10, recruitment needs become negative and there would therefore be no need for any pre-service training.

Under the 100 percent adult mortality scenario, with full replacement of un-trained teachers, total projected recruited for 2000-2009 will roughly equal the projected supply of graduates from the four colleges of education. However, by 2009/10, only 190 newly trained teachers will be required who could be trained at just one of the four colleges of education.

Scenario 2 – lower intake and higher drop out and repetition: Under this enrolment scenario, teacher recruitment targets are considerably lower than in the RNPE scenario. The recruitment target becomes negative by 2006 under the lowest mortality scenario. Faced with this situation there would no longer be any need for any pre-service teacher training and the colleges of education would have to focus almost exclusively on qualification up-grading among serving teaching staff as well as in-service training courses. Teacher up-grading could, in fact, be largely completed by this date if the newly introduced distance education programme for serving primary school teachers is successfully implemented.

9.4 SECONDARY EDUCATION

9.4.1 Community junior secondary schools

Table 9.4 shows that there are also very large differences in recruitment needs for CJSS teachers between the six possible enrolment and mortality scenarios.

[24] The total intake for the four colleges of education has been recently been adjusted upwards from 500 to the full capacity level of 720. In view of shortage of hostel accommodation, the additional intake will attend as day students. The overall quality of teacher trainees is improving as a result for increased competition for places among senior secondary school leavers. A new combined primary and secondary teacher training college has been planned for Francistown for some time. It is now hoped to open the college in 2006 with an enrolment of 420 teacher trainees over and above the planned output of 1,340. Given that the four Colleges of Education are seriously over-staffed, pre-service teacher training could be increased substantially with little or no change in establishment levels.

Scenario 1 – RNPE targets: If the RNPE enrolment targets are met and teacher AIDS-related mortality is the same as that projected for the adult 20-65 population, then a total of 4665 teachers will need to be trained at the two teacher training colleges (at Molepolole and Tonota) during the next ten years. Planned outputs from these colleges for this period are around 5,200.

Clearly, the most desirable outcome is the attainment of the RNPE enrolment targets and relatively low (50 percent) teacher mortality. If this could be achieved, then only 2900 CJSS teachers will need to be recruited between 2000/01 and 2009/10. Replacing all temporary and foreign contract teachers increases this figure to 4565 so, with no changes in planned teacher trainer enrolments, there would still be an over-supply of 600-700 CJSS graduates during the next decade.

Table 9.4: Junior secondary teachers requirements 2000-2009

SCENARIO 1: RNPE TARGETS

	2000	2001	2002	2003	2004	2005		2007		2009	Total
GROWTH	-3	109	148	149	174	77	223	129	102	-85	1023
20-64 unadjusted	116	139	161	184	208	230	252	271	282	285	2127
50% 20-64 unadjusted	58	69	80	92	104	115	126	135	141	143	1063
25% 20-64 unadjusted	29	35	40	46	52	58	63	68	70	71	532
OTHER ATTRITION	119	121	124	127	130	132	136	139	141	139	1306
COVER FOR SICK TEACHERS											
20-64 unadjusted	74	20	14	15	14	24	13	13	17	5	209
50% 20-64 unadjusted	37	10	7	8	7	13	6	7	8	2	105
25% 20-64 unadjusted	19	5	4	4	3	7	3	3	4	1	53
RECRUITMENT TARGETS											
20-64 unadjusted	305	389	446	474	526	463	624	551	541	344	4665
50% 20-64 unadjusted	173	299	352	367	408	324	485	403	384	197	3392
25% 20-64 unadjusted	163	269	316	326	359	273	425	338	317	126	2914

SCENARIO 2: LOWER INTAKE-HIGHER DROP-OUT AND REPETITION

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
GROWTH	-69	-10	-21	-108	-114	-170	-26	-56	-16	-108	-698
AIDS DEATH											
20-64 unadjusted	114	135	152	166	179	190	200	209	214	215	1773
50% 20-64 unadjusted	57	67	76	83	90	95	100	104	107	107	887
25% 20-64 unadjusted	29	34	38	41	45	48	50	52	53	54	443
OTHER ATTRITION	117	117	117	114	112	109	108	107	107	105	1113
COVER FOR SICK TEACHERS											
20-64 unadjusted	73	15	13	10	6	15	5	7	10	2	156
50% 20-64 unadjusted	37	8	7	5	3	6	2	3	5	1	77
25% 20-64 unadjusted	18	4	4	3	2	3	1	2	2	0	39
RECRUITMENT											

TARGETS											
20-64 unadjusted	236	257	260	182	184	144	288	267	314	213	2344
50% 20-64 unadjusted	142	182	178	94	91	40	184	159	203	105	1379
25% 20-64 unadjusted	95	145	137	51	45	-11	133	105	146	50	897

Scenario 2 - lower intake and higher repetition and dropout: With lower intake rates and higher drop out and repetition, total junior secondary teacher requirements for the next decade are only 2344, 1379, and 897 under the three mortality scenarios. Thus, even if all temporary and expatriate teachers are replaced, there will be still be chronic over-supply from the two colleges of education.

9.4.2 Senior secondary schools

Variations of roughly the same order of magnitude prevail with respect to recruitment targets for senior secondary teachers (see Table 9.5).

Scenario 1 – RNPE targets: Under the lowest mortality scenario, a total of 1065 senior secondary teacher recruitment requirements will have to be recruited over the next decade if the RNPE targets are to met. An additional 750 university graduates will also be required if foreign and untrained senior secondary school teachers are to be completely phased out by the end of this period.

Table 9.5: Senior secondary teacher requirements 2000-2009

SCENARIO 1: RNPE TARGETS

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
GROWTH	29	6	25	44	63	89	41	51	37	66	451
20-64 Unadjusted	38	45	51	58	66	75	81	88	91	96	690
50% 20-64 unadjusted	19	22	25	29	33	38	41	44	46	48	345
25% 20-64 unadjusted	9	11	13	15	17	19	20	22	23	24	172
OTHER ATTRITION	39	39	39	40	41	43	44	45	46	47	423
COVER FOR SICK TEACHERS											
20-64 Unadjusted	24	5	5	5	4	10	3	5	5	5	71
50% 20-64 unadjusted	12	2	2	2	2	5	2	3	3	2	35
25% 20-64 unadjusted	6	1	1	1	1	1	3	1	2	2	19
RECRUITMENT TARGETS											
20-64 Unadjusted	129	94	120	147	174	218	169	189	179	214	1634
50% 20-64 unadjusted	98	69	92	115	139	175	128	143	131	163	1253
25% 20-64 unadjusted	83	57	78	100	122	152	108	119	108	139	1065

Scenario 2 - lower intake and higher repetition and dropout: Under the lowest mortality scenario, only 388 university graduates will need to be recruited for senior secondary schools during the next decade (i.e an average of only around 40 per annum). Even assuming that teacher mortality rates are the same as for the adult population as a whole (which seems highly unlikely), only 80-90 graduates will need to be recruited each year.

SCENARIO 2: LOWER INTAKE-HIGHER DROP-OUT AND REPETITION

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
GROWTH	22	-5	0	-9	-10	7	-53	-55	-35	-8	-146
20-64 Unadjusted	37	44	50	55	61	67	69	70	70	72	595
50% 20-64 unadjusted	19	22	25	28	30	33	34	35	35	36	298
25% 20-64 unadjusted	9	11	12	14	15	17	17	18	18	18	149
OTHER ATTRITION	38	38	38	38	38	38	37	36	35	35	373
COVER FOR SICK TEACHERS											
20-64 Unadjusted	24	5	5	4	3	7	0	2	2	2	54

50% 20-64 unadjusted	12	2	3	2	1	3	0	1	1	1	26
25% 20-64 unadjusted	6	1	2	1	0	1	0	1	0	1	13
RECRUITMENT TARGETS											
20-64 Unadjusted	122	82	93	88	92	119	53	53	73	101	876
50% 20-64 unadjusted	91	57	66	59	59	81	18	17	36	64	550
25% 20-64 unadjusted	76	45	53	44	43	63	1	-1	18	46	388

CHAPTER 10

FUNDING ISSUES

There are three ways in which the HIV/AIDS epidemic affects the overall funding requirements for primary and secondary schooling namely, impacts on student enrolments and staffing costs, and the overall cost of HIV/AIDS prevention and mitigation interventions.

10.1 ENROLMENTS

In high prevalence countries, the epidemic will result in considerably smaller school aged populations than would been the case without AIDS. In Botswana, the projected 'without AIDS' 5-14 population is 30 percent less than the projected 'with AIDS' population. Assuming that student unit costs remain at least at current levels (in real terms), then total expenditure on the school system will be roughly 30 percent less than expected.

The unit costs of primary and secondary education in 1999/200 were P1850 and P5000 respectively. The total projected costs for the RNPE full enrolment scenario in 2005 and 2009 are presented in Table 10.1, (again assuming that the unit costs for each type of schooling remain unchanged in real terms). It can be observed that, with free basic education, total government expenditure on primary education will fall by 10 percent between 1999 and 2009, while expenditure on secondary education will increase by 18.8 percent. Total expenditure on all schools will increase by only 5.9 percent during this period.

Table 10.1: Projected total funding requirements for primary and secondary education, 2004 and 2009 (P million)

	Funding requirement				
		2004	2009		2009
PRIMARY	599	625	540	4.3	-10
CJSS	575	630	675	9.6	17.4
SENIOR SECONDARY	170	180	210	5.9	23.5
TOTAL	**1344**	**1435**	**1425**	**6.8**	**5.9**

10.2 HUMAN RESOURCE COSTS

Higher levels of morbidity and mortality among teaching and other MoE staff will result in additional expenditures.

Staff replacement: Table 10.2 presents estimates of the total cost of training new teachers who are needed in order to replace those who have died of AIDS-related

illnesses[25]. The average annual cost between 2000 and 2009 will between P. 14-26 million. In the case of the graduates from the University of Botswana, a considerable part of this cost will be borne by the individual student rather than government. Replacement costs will amount, therefore, to only around 0.4–0.8 percent of total recurrent expenditure on education.

Table 10.2 Replacement training costs for AIDS-deaths among teaching, 2000-2009 (P millions)

	Unit training cost	**Mortality scenario**		
		Adult 20-64	50%	25%
PRIMARY	19500	46.2	12.6	4.2
CJSS	19500	90	68.2	56.8
SENIOR SECONDARY	75000	122.6	94	79.8
TOTAL		**258.8**	**174.8**	**140.8**

Notes: Includes expatriates so biased upwards; Assumes that 75 percent of university budget is devoted to teaching services

Cover for sick teachers: The average annual cost estimates of employing additional staff to cover for teachers with AIDS-related illnesses over the next decade are presented in Table 10.3. These range from 3.5 -13.6 million per annum

Table 10.3: Salary costs of 'supply teachers' to cover for AIDS-related illness, average annual 2000-2009 (P millions)

	Average salary	**Mortality scenarios**		
		Same adult	50%	25%
PRIMARY	26700	6.3	3.2	1.6
CJSS	39330	5.5	2.7	1.4
SENIOR SECONDARY	39330	1.8	0.9	0.5
TOTAL		13.6	6.8	3.5

Total human resource costs: Combining expenditures on replacement training and teaching cover, the staffing costs of HIV/AIDS will be, on average, between P17.6 million and 39.5 million per annum during the next decade, which is equivalent to 0.8-1.7 percent of the 2000/01 recurrent budget of the MoE. Given the seriousness of the AIDS epidemic, this does not, therefore, represent a major financial burden.

[25] Where overall growth in total teacher requirements is negative between 2000 and 2009 (as is the case with primary education) then not all teachers who die will need to be replaced. It has also been assumed that the proportions of expatriate teachers at CJSS and senior secondary schools will remain unchanged. In order to maintain the experience profile of teaching force as a whole, reliance on expatriate teachers would have to be increased.

In addition, there are a number of one-off expenditures, in particular the initial training for G&C teachers and AIDS counsellors as well as in-service training workshops for all 20,000 teachers.

10.3 AIDS PREVENTION AND MITIGATION

Table 10.4 presents rough estimates of the projected annual expenditure for each of the main components of the AIDS management programme for the period 2000-2009. Total recurrent costs are P 50-55 million per annum, which are approximately 2.5 percent of the total recurrent budget for the MoE budget in 2000/01. Two-thirds of this expenditure is accounted for by the deployment of nearly 1000 full-time G&C teachers[26].

10.4 RELATED SUPPORT PROGRAMMES

Continued support of orphans and home-based carers of terminally ill patients will be crucially important in ensuring the attainment of the RNPE enrolment and learning targets. With anything up to 65-90,000 registered orphans in need of material support from S&CD by 2010, the total cost of food rations alone will increase to P 60-85 million per annum by the end of the decade.

Table10.4: Annual recurrent budget for the AIDS management programme

	P million
A. PERSONNEL COSTS	
Programme management	
National director (1 @ P150K/annum)	0.15
Programme coordinators and regional directors (7 @ P100K/annum)	0.7
Programme officers (12 @P75K/annum)	0.9
Sub-total	1.75
Student prevention	
Full-time G&C teachers (1 per 500 students)	
Primary schools (700 @ P35K/annum)	24.5
Secondary schools (250 @ P45K/annum)	11.25
Sub-total	35.75
AIDS in the Workplace	
AIDS counsellors (40 at P50K/annum)	2
B. Materials development and production	
Student prevention	5
Teacher prevention	1
Sub-total	6
C. In-service training	2
G&C teachers (950 for 3days/year)	
AIDS Counsellors (40 for 5 days/year)	
School managers (one per school for 1day/year)	
D. Other	
Subsistence and travel (AIDS management team and AIDS	0.75

[26] The alternative to increasing the size of the teacher establishment by 950 would be re-deploy existing teachers and increase average class size by around 4-5 percent.

Counsellors)	
School theatre groups (four groups, 20 actors)	2
Sub-total	2.75
TOTAL	**52.75**

CHAPTER 11

ORGANISATION, PLANNING AND MANAGEMENT

Knowing what should be done is obviously crucial. This study has made numerous recommendations which, taken together, amount to a major programme of action with respect to both HIV/AIDS prevention and mitigation for students and staff. However, it is equally important to consider how this programme should be operationalised. Specifically, what type of organisational and managerial arrangements are needed in order to ensure that this programme is designed and implemented as quickly and cost-effectively as possible.

11.1 CURRENT ORGANISATIONAL ARRANGEMENTS

11.1.1 The national level

It has taken a long time for politicians, civil servants, and the public at large in Botswana to appreciate the seriousness of the HIV/AIDS pandemic. For most of the 1990s, HIV/AIDS was narrowly perceived as a health issue and thus, within government at least, most ministries looked to the Ministry of Health for leadership. However, the AIDS/STD Unit, which was established as the main implementation agency for government's HIV/AIDS strategy, has had neither the authority nor the human and financial resources to ensure that HIV/AIDS was mainstreamed as a top priority throughout government.

In the MoE, as in other ministries, while there have been many meetings and other consultations about what should be done about HIV/AIDS, in practice, very little concrete action has been taken. CD&E was given responsibility for the design of the new HIV/AIDS curriculum guidelines, but for other departments, HIV/AIDS has remained a peripheral concern.

Fortunately, the need for more concerted national HIV/AIDS strategy has now been recognised by the government. A National AIDS Coordinating Agency (NACA) was established in mid 2000 with overall responsibility for planning and managing this process. The President is the Chairman of the National AIDS Council to which NACA is expected to report on a regular basis. However, NACA, like the STD/AIDS Unit, is still located in the MoH rather than the Office of the President. District Multi-Sectoral AIDS Committees have also begun to function at the district level, but coverage is still patchy.

11.1.2 The Ministry of Education

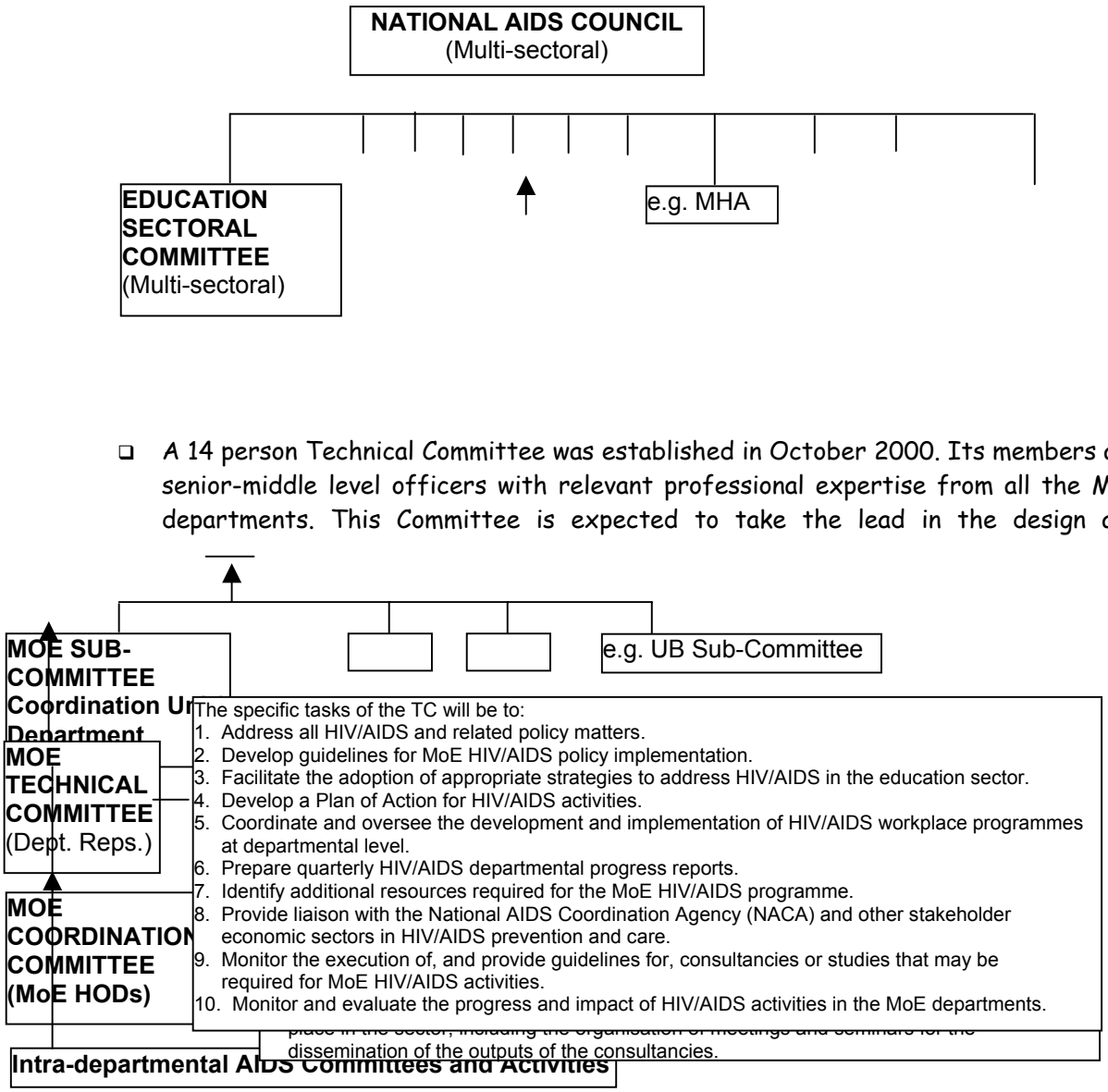
Within the MoE itself, HIV/AIDS has now been accorded top priority by senior management. Three HIV/AIDS committees have been or are in the process of being

established in order to develop the Ministry's response to the challenges posed by the epidemic:

- An apex Ministerial Advisory Committee of 6-7 senior officers, which is chaired by the Permanent Secretary and reports directly to NACA. This committee was established in mid-2000.

- An AIDS Coordinating Committee for all heads of department. This was approved by the MoE Policy and Advisory Committee in September 2000. It had not met by early December 2000.

Figure 11.1: HIV/AIDS committee structure in the Ministry of Education



- A 14 person Technical Committee was established in October 2000. Its members are senior-middle level officers with relevant professional expertise from all the MoE departments. This Committee is expected to take the lead in the design and implementation of the Ministry's HIV/AIDS programme. It has already been agreed that some staff will be seconded to work full time for the Committee for periods of up to six months during 2001.

A full-time AIDS Coordinator position was established in the Department of Planning, Research and Statistics in October 2000. The current incumbent is Mrs Limpet Mpotokwane, Senior Education Officer who has been seconded from DC&E.

The main weakness of these organisational arrangements is that the Technical Committee, even with seconded staff, is unlikely to have sufficient power and authority nor the critical mass of specialised expertise that is needed in order to design and implement effectively a comprehensive HIIV/AIDS management programme

11.2 HIV/AIDS MANAGEMENT PROGRAMME

The MoE must make the HIV/AIDS crisis its top priority for at least the next ten years. Nothing short of a ministry-wide mobilisation is required in order to deal with this crisis. Figure 11.2 presents an organisation and management structure, which will be the most effective in tackling an emergency of this magnitude.

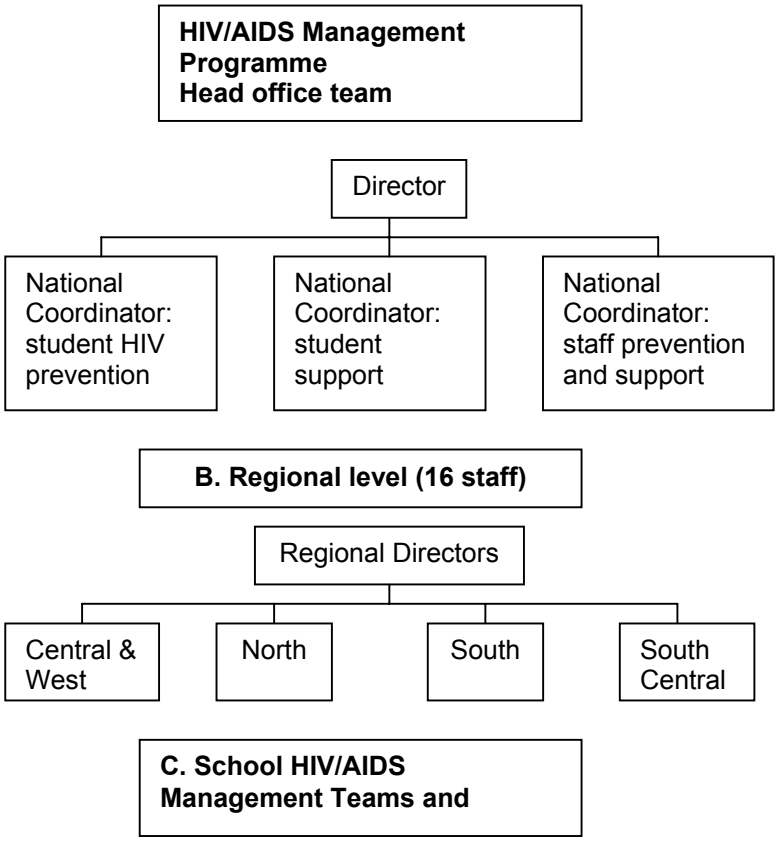
11.2.1 HIV/AIDS National Management Team

Since HIV/AIDS is a ministry-wide problem, no one department should be given overall responsibility for the planning and management of this process. The National AIDS Management Team should not therefore, be formally attached to any one department, but should instead be a free standing 'project team'.

It is recommended that this team should comprise of four managers. The national director should have overall management responsibility for the entire strategy. It is essential that this person has the power and authority to ensure that each department within the Ministry fulfills the specific objectives of the overall strategy and annual action plans. The Director should, therefore, have the rank of a Deputy Permanent Secretary and report directly to the Permanent Secretary.

The other three members of the team should each be responsible for the management of three separate sub-programmes, namely student HIV prevention, student support, and staff prevention and support i.e. AIDS in the worbkplace policies.

Figure 10.2: Possible organisational structure for the MoE AIDS Management Programme



The MoE does not currently have staff with the expertise and experience that is needed for the planning and managing a large and complex HIV/AIDS strategy of this kind. The National Director and some of the National Programme Coordinators will, therefore, have to be external appointments.

So that this team can be appointed as soon as possible, it is recommended that the HIV/AIDS management programme is established as a separate project. Past experience suggests that it can take over a year for new posts, especially at senior levels, to be created. It is crucial that full implementation of the strategy commences as soon as possible, and certainly no later than in early 2001. Long bureaucratic delays must, therefore, be avoided at all costs.

11.2.2 HIV/AIDS Regional Management Teams

Implementation of the HIV/AIDS strategy should be the responsibility of four regional teams. Each team should have a Regional Programme Manager and at least three other professional staff. Between them they will have overall responsibility for the implementation of the AIDS management programme in all schools and other education and training institutions in each region.

A total of 20 full-time professional staff (which is less than 0.1 percent of total employment in the Ministry) should, therefore, be deployed at the national and regional

levels. While this is a major commitment of personnel and resources, such a critical mass of professional expertise is essential.

11.2.3 School and Departmental HIV/AIDS Management Teams

At the school and departmental level, implementation of the HIV/AIDS management programme should be the responsibility of the School/Departmental HIV/AIDS Management Team, which should be chaired by the Head teacher. Key resource people are Guidance and Counselling teachers and AIDS Counsellors.

11.2.4 Committee structure

It is recommended that a single, high-powered HIV/AIDS Committee for the MoE is established in order to advise the Minister and senior management and supervise the work of the National HIV/AIDS Management Programme itself. All heads of department should be members of this Committee, which should be chaired by the Minister of Education. Specialist committees should also be set up for each of the three sub-programmes. Their memberships should be drawn from the relevant MoE departments as well as other relevant government ministries and NGOs. Finally, each Education Region should have its own Regional HIV/AIDS Management Programme Committee.

11.3INFORMATION SYSTEM

A comprehensive information system must be developed in order to monitor and evaluate the HIV/AIDS management programme. The Infinium Human Resource MIS is a key resource. So is the Annual Statistical Return, which is completed by every school. However, urgent action should be taken to ensure that these questionnaires are completed, processed, and analysed within three-four months.

There are a number of key information gaps that need to be plugged as soon as possible in each of the three key impact areas.

Student prevention

- Regular surveys (at least biennial) of adolescent (10-18) and youth (19-25) sexual behaviour and HIV prevalence (NACA and Ministry of Health).

- Age-disaggregated data on STD and family planning attendances (CSO Health Statistics Unit)

- Main extra-curricula prevention activities (peer education, AIDS clubs, talks by outside speakers, visits to institutions (hospitals, etc)

Student support

- Needs assessment for orphans, children living with AIDS, and child carers (all schools and other education and training institutions).

- Main support activities for children directly affected by HIV/AIDS (counselling, referrals, etc) (School HIV/AIDS Management Programme questionnaire)

- Performance indicators for children directly affected by AIDS - attendance, repetition, dropout, and examinations (School HIV/AIDS Management Programme questionnaire)

Staff prevention and support

- Data on socio-economic status/occupation to be collected as part of the antenatal clinic HIV sentinel surveys (AIDS/STD Unit, Ministry of Health).

- HIV prevalence and risk assessment for teaching and other staff (NHAMP)

- BPOMAS membership (Annual Statistical Return/Infinium Database).

- Up-take and monitoring of the impact of anti-retroviral drug therapies (BPOMAS)

- Staff absenteeism – absences and reasons. Long-term sick leave (Annual Statistical Return).

- Staff transfers – number, reasons. Spouse separation (Annual Statistical Return/Infinium MIS).

- Sexual misconduct – cases and outcomes (Annual Statistical Return).

CHAPTER 12

CONCLUSION

This report has comprehensively reviewed all aspects of the actual and potential impacts of the HIV/AIDS epidemic in primary and secondary schooling in Botswana. While it is clear that the impact to date has been fairly limited, the epidemic does pose a serious threat to the attainment of national educational objectives. Consequently, it is not too late for decisive action to be taken to prevent and mitigate the impacts of the scourge during the next 10-20 years.

Another equally important conclusion is that Botswana, unlike many other developing countries, has the capacity, (both financial and otherwise), to implement a number of policies that will ensure that the large majority of children most directly affected by the epidemic will continue to attend school. Moreover, teacher mortality from AIDS is likely to be much less than anticipated, in particular because teaching staff should be able to access life-prolonging anti-retroviral drugs.

While these are very positive findings, there is absolutely no room for complacency. The MoE along with its main partners must still adopt a wide-ranging strategy to manage the AIDS crisis in the education sector. This will require a major commitment of resources and appropriate organisational and management arrangements that will ensure that tackling HIV/AIDS is mainstreamed throughout the organisation.

Finally, it is important to emphasise that this study is just the first step in developing this strategy. A lot more detailed research needs to be undertaken. A number of future research priority areas have been identified. These include student and teaching staff HIV prevalence, the situation of orphans in schools, school-community relations, peer education, medical aid, spouse separation, and sexual harassment. It is also important that more detailed demographic projections are developed both with respect to student enrolments and teaching staff morbidity and mortality.

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APPENDIX 1 - CURRICULUM CONTENT ON HIV/AIDS

Guidance and Counselling Guidelines

Form 1 social guidance.
Family life education. 2.1.2 be aware of the emotional and social response to STDs and HIV/AIDS

2.1.2.1 identify and discuss situations which could led to STD (or HIV/AIDS) infections, e.g. financial inducements, threats, ignorance, recklessness, treats, sexual abuse, negligence, peer pressure, romance, experimentation, etc.

2.1.2.2 identify and discuss the support services available, in Botswana, to HIV/AIDS patients

2.1.2.3 distinguish between facts and myths about HIV/AIDS

2.1.2.4 state safe ways of helping an AIDS patient

2.1.2.5 discuss stress management techniques and their relevance for STD and HIV/AIDS patients

2.1.2.6 discuss the socio-economic impact of HIV/AIDS

Form 5 Family management 2.3.1 understands the process of establishing and managing a family

2.3.1.3 identify social changes and describe how to cope with them in the home situation

discuss the impact of the following on a family, teenage pregnancy, AIDS rape, imprisonment, retrenchment, alcoholism, separation and divorce, debt and other financial difficulties, domestic violence, abuse, talking plans, having fun, doing things together, unemployment, success …. Keep a balance between the features that are welcome and those that are unwelcome

Subject Disciplines – Primary School

Topic	General objectives	Specific instructional objectives
Standard 6, Module 7: Family Life 7.1 male and female 7.2 Physical changes in our bodies 7.3 Puberty	Pupils should 7.1 recognise the differences and similarities between male and female 7.2 be aware of the changes that take place in their bodies as they grow 7.3 come to terms with their physical and emotional changes at puberty	Pupils should be aware: 7.1 of the differences between m and f 7.2 of **the physical observable** changes that take place as their bodies grow 7.3 of the changes taking place at puberty
Standard 7, Module 7: Family Life 7.1 Male repro system, female repro system,	Pupils should: 7.1 acquire knowledge of sexual reproduction in human beings	Pupils should be able to : 7.1 - identify the parts of male reproductive system ■ describe the function of male reproductive system

sexual reproduction 7.2 Sexual behaviour problems	7.2 be aware of dangers of irresponsible sexual behaviours and consider their responsibilities to themselves and other people	■ identify the parts of the female reproductive system ■ describe the function of the female reproductive system ■ describe sexual reproduction 7.2describe problem of unwanted pregnancies describe the problems of teenage pregnancies describe how to avoid early and unwanted pregnancies describe how STDs and AIDS are caused, spread and how they can be avoided

9 MODULES EACH YEAR OF SCIENCE IN STANDARDS 6 AND 7

1. Weather and seasons
2. plants in nature
3. animals in nature
4. water
5. energy (energy and magnetism)
6. keeping healthy
7. family life
8. safety
9. environmental awareness

Subjects: Science, Setswana, English, Social Studies, Agriculture, Religious Education, Religious education, Mathematics.

Subject Disciplines—Junior Secondary

Art JSS - Module 1, Art and Population and FLE issues 1.1.6.1 discuss and create art works that confront the potential crisis of population and family life,

Design & Technology, Year 1 JSS, First AID techniques, preventing contagion with HIV/AIDS

Moral Education, JSS, Form 2, Module 2 Personal Moral Issues.

2.3.5 Know and understand the basic elements about HIV/AIDS and STDs.
2.3.5.1 list possible behaviours, which may result in contracting HIV and other STDs
2.3.5.2 review symptoms
2.3.5.3 state the apparent normality of HIV infected person
2.3.5.4 discuss ways of living positively with HIV
2.3.5.5 list at least 3 contacts that will not result in transmission of HIV
2.3.5.6 discuss popular myths about HIV
2.3.5.7 discuss the possible consequences of HIV/AIDS to the individual, family , community and nation
2.3.6 develop considerate attitudes towards people with HIV/AIDS
2.3.6.1 make use of moral values to develop a positive attitude towards people with AIDS
2.3.6.2 discuss why it is important for AIDS patients to be met with a compassionate attitude

Unit 2.4. Choices of life and death. Death and bereavement, suicide, etc

Module 4. Unit 4.1 Children's rights, appreciate the child, child abuse, sexual abuse,

Rel Education JSS, Module 4 (Form 2 Term 3) HIV/AIDS in the community 4.1.3 understand facts about HIV/AIDS

4.1.3.1 explain what some religions feel are the causes of HIV/AIDS

4.1.3.2 outline the effect of HIV/AIDS in the community

4.1.3.3 discuss how different religions help in controlling the spread of HIV

4.1.3.4 investigate if religions are assisting in making AIDS victims feel accepted

4.1.3.5 describe the role of different religions in counselling AIDS victims

Science, Module 3, Unit 3.3, Sexual Behaviour Problems (10 periods)

3.3.3 acquire basic knowledge of sexually transmitted diseases and HIV/AIDS and be aware of their prevalence and seriousness.

3.3.3.1 list common sexually transmitted diseases, e.g. AIDS, gonorrhea, syphilis, thrush, genital herpes, genital warts, chancroic and chlamydia

3.3.3.2 describe signs, treatment, transmission of STDs, syphilis, gonorrhea, herpes and thrush

3.3.3.3 explain complications of untreated STDs

3.3.3.4 describe transmission of HIV

3.3.3.5 state that a person infected with HIV can still appear normal

3.3.3.6 state the conditions of advanced AIDS patients

3.3.3.7 state how HIV/AIDS/STDs infection can be prevented

3.3.3.8 interpret statistical information on STDs and HIV/AIDS cases in Botswana

Unit 7.3 Transporting substances in the human body

What is blood?

7.3.1 Acquire knowledge of the nature of blood, blood groups and blood transfusions.

7.3.15 describe measures taken during blood transfusion (include screening for compatibility, HIV, syphilis, hepatitis B)

Unit 7.5 Communicable Diseases (Healthy Living module)

Causes of infectious diseases

7.5.1 be aware of the causes of common communicable diseases

7.5.1.2 list communicable diseases e.g. TB, bilharzia, malaria, polio, flu, stds (syphilis, gonorrhea, hiv/aids), intestinal infections, ringworm

Teacher's Guide, Science by investigation in Botswana (JSS course) Cells, Reproduction and family life is Module 2 of 6, has 4 units--living cells; sexual reproduction in plants, sexual reproduction in mammals (including humans), and family life.

HIV/AIDS are in the last module. Suggests gets help from health worker. Topics include family planning (7 modern methods and periodic abstinence (rhythm);)teenage pregnancies--disadvantages of; abortion --disadvantages of; population growth; sexually transmitted diseases (sexual network, non-s symptomatic nature of most, role of being faithful in reducing chances of getting STDs; fungal infections, gonorrhea, syphilis, AIDS--meaning of acronym what it does i.e. attacks immune system, methods of transmission, methods of non-transmission, the symptoms vary, no cure, need a blood test, 'To avoid AIDS, a person who is not infected must only have sexual intercourse with one faithful uninfected partner. If in doubt always use a condom.'

Subject Disciplines--BGCSE syllabus (senior secondary)

Commerce - nothing

D&T - first aid, preventive measures for contagion,
Art & Design - no mention
Physics - no mention
Geography Module 5 Population and settlement studies
Define HIV/AIDS
Interpret Botswana's HIV/AIDS statistics and account for its distribution
Assess the social and economic impact of HIV/AIDS in Botswana
Discuss efforts being taken to address the HIV/AIDS problem in Botswana
Agriculture -- no mention
Chemistry -- no mention
Mathematics -- no mention in stats section, or graphs section
English -- no explicit mention
History -- no mention
Science Single award -- sexual reproduction in mammals,(a) describe causes, transmission symptoms/signs, effects and treatment of g, s and AIDS (b) discuss the control of the spread of STDS (g,s, AIDS)
Double science award -- (as above) in biology