



HIV/AIDS and education: experience in changing behaviour: a Kenyan example

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Introduction

The *Primary School Action for Better Health* (PSABH) project was first funded on a small scale by DFID in 1999, under a health umbrella programme called *HIV and AIDS Prevention and Care* (HAPAC). HAPAC was implemented throughout one rural region in Kenya, called Nyanza Province, which borders Lake Victoria. After initial, positive impressions the project was expanded in order to test the potential impact of a large-scale, school-based HIV and AIDS education intervention on pupil knowledge, attitudes and behaviour. The overall objective was to bring about positive, risk-reducing behaviour changes in pupils in Standards 6, 7 and 8 (approximate age range 10–16 years).

Project implementation methodology

The PSABH programme is being implemented in 1,250 of the 3,840 primary schools in Nyanza Province and a further 400 in urban sites in other Kenyan provinces. It is based on the mainstream systems and structures of the education sector and takes the normal school day as its starting point. The Ministry of Education, Science and Technology (MoEST) has an HIV and AIDS education syllabus, a series of textbooks called 'Let's Talk About AIDS' and has allocated one teaching period a week to the topic. Class sets of teaching and learning materials are supplied to schools after they have attended the training programme.

The programme has been managed by the Centre for British Teachers (CfBT) through the MoEST administrative structure with the full involvement of MoEST national, provincial and district officers in planning, implementation and monitoring. A strengthened training cascade has been developed, based on integrated teams of MoEST and Ministry of Health (MoH) staff. The strengthened cascade brings trainers from different levels and regions together and training workshops

are run to high levels of common standards and practices. A range of training approaches are adopted, including the use of videos. Pupils were invited to take part in their own training programme in peer support activities.

Each school is invited to send the head teacher, one resource teacher and a community representative/parent to take part in a two-cycle, residential training programme. In the first cycle of training, a broad range of knowledge-based topics to support the inclusion of HIV and AIDS education into school activities are introduced, such as: school planning; guidance; factual information on the transmission and prevention of STIs, HIV and AIDS; life skills and living values; adolescent health and sexuality; use of anonymous Question Boxes and setting up School Health Clubs. The participants are recalled for a second cycle of training after approximately one semester back at school, during which the focus is on the adolescent environment and skills and activities that will support positive behaviour change. Further information is provided on the management of HIV and positive living.

The challenges encountered in implementation relate largely to: 1) the sensitive nature of HIV and AIDS information and the deeply embedded responses of stigma, discrimination and silent denial; 2) maintaining quality, consistency and effectiveness when working with such large numbers that micro-management is not possible; and 3) the intrinsically difficult task of changing behaviour.

Monitoring, research and evaluation design

Programme implementation in Standards 6 and 7 is being evaluated using a quasi-experimental design. One hundred and sixty schools (80 target and 80 control) were selected in Nyanza using multi-stage stratified, disproportionate





random sampling. Over 12,000 pupils and 400 teachers from these schools are participating in the evaluation. Short-term (approximately six-month) evaluation results were produced using data collected in these schools at three time points. Table 1 outlines the sequence of activities up to March 2003. Data collection for evaluation will continue until late in 2003 in order to assess the programme's longer-term effects at 15–16 months after the completion of teacher training.

Unanticipated events

Three unanticipated events influenced programme implementation and evaluation. First, not all target schools sent representatives to training and some control schools found ways to attend training. In addition, between the end of Course B training and wave two data collection, schools experienced a lengthy teacher strike in October 2002, which disrupted PSABH implementation at school level until the end of that semester. Finally, in January of 2003, the newly elected Government of Kenya introduced free primary education, which had a major impact on schools in this project. Over 2000 pupils in standards six and seven, who completed surveys in February 2003, reported that they had not been in school in 2002. In addition, the range of ages of pupils in these grades expanded by six years.

In consultation with CfBT, it was decided that because of these events five control and three target schools would be reassigned based on participation in Courses A and B; the pupil sample analysed at wave two would be restricted to

those who had attended school during 2002 and only pupils between the ages of 11 and 16 years at the time of data collection would be included in analyses.

Key findings at six-month evaluation

HIV/AIDS in communities

AIDS is very real in the lives of the communities participating in this programme. By February 2003, 80% of teachers and over 50% of pupils reported that they knew someone in their community who had died of or was living with AIDS. Multiple groups, including churches, have risen to the challenge of combating AIDS by bringing HIV/AIDS prevention programming to all communities (target and control) participating in this evaluation. The main HIV prevention messages in the communities promote abstinence prior to marriage and faithfulness to one partner. From in-depth interviews it was evident, however, that failure to abide by these risk-reducing behaviours was not only common, but expected. While condoms were available to youth and adults in 71% of communities, there was strong resistance to teaching youth that condoms can be an effective way of reducing the risk of transmitting HIV. This resistance was seen in the prevailing silence or provision of false information designed to discourage the use of condoms by youth.

HIV/AIDS activity in the schools

PSABH trained teachers moved quickly to train their colleagues and to implement HIV/AIDS programming in

Table 1 Sequence of activities

Date	Activity	Details
November 2001		Teachers and pupils in 80 control and 80 target schools completed self-completion surveys.
March 2002	Data collection – wave one	Interviews and focus groups conducted in 8 control and 8 target schools and communities. Zonal inspectors collected pregnancy data in 80 control and 80 target schools.
April 2002	Training	Teachers and community representatives from 80 target schools completed Training Course A.
August 2002	Interim data collection and training	Zonal inspectors completed School and Community Responsiveness Surveys in 80 target, and 80 control schools and communities. Teachers and community representatives from 80 target schools completed Training Course B.
December 2002	Training	Four peer supporters and one teacher patron from each of 80 target schools completed training.
February 2003	Data collection – wave two	Teachers and pupils in 80 control and 80 target schools completed self-completion surveys and interviews and focus groups were conducted in 4 target communities.
March 2003		Zonal inspectors collected pregnancy data in 80 control and 80 target schools.



their schools. Training of colleagues most often took place in staff meetings, typically of about two hours in duration. The topics most likely to be covered were those relating to theoretical teaching approaches, such as infusion and integration and least likely to be practical teaching, such as activities on life skills and living values and communication approaches.

Teachers expressed readiness to teach about HIV and AIDS and felt they could produce a change in pupil behaviours. They also, however, reported feeling overwhelmed by barriers and difficulties to such teaching. While PSABH training was important to overcoming these barriers, some still remained. This was particularly the case in poorly resourced schools and in schools where pupil academic performance was weaker. The barriers to programme implementation reported in control schools were most often related to lack of training, while in target schools reported barriers were teaching difficulties (e.g., insufficient time, scheduling difficulties).

Target schools made significant gains over time in implementation compared to control schools. This was evidenced in the identification and use of more HIV/AIDS teaching resources and the diffusion of HIV/AIDS teaching across the curriculum. By contrast, control schools accessed fewer resources and were more likely to concentrate HIV/AIDS teaching in Home Science. Target schools were also more likely to have taken up some of the more innovative approaches encouraged in PSABH training, such as organising a Health Club and Question Box.

Factual and behaviour change messages were evident in all schools, with little difference between target and control schools in the content of these messages. Messages, however, were significantly more likely to be found in work produced by pupils and teachers in target than in control schools.

Overall, pupils rated the HIV/AIDS programming as useful and helpful. In focus-group discussions, pupils cited Health Clubs and Question Boxes as particularly desirable initiatives; however, the extent to which these initiatives remained in place over time was uncertain.

Changes in pupils' knowledge, attitudes and behaviour

Knowledge

There was no statistically significant change evident in pupil knowledge in either control or target schools. This suggests that something was interfering with improvement in knowledge in all communities and that the PSABH programme was unable, in this short time period, to counteract this effect.

In further analysis, knowledge was found to be higher and did improve in schools with: higher teacher/pupil ratios; predominantly Kisii pupils; higher scores in HIV/AIDS programme implementation; higher ratings by pupils of the practical usefulness of the programme; and in communities where more churches were holding meetings on HIV and AIDS.

Communication and pursuing information

At the beginning of the programme, all pupils expressed a desire for more information and communication about HIV/AIDS. At the six-month evaluation, pupils in target schools reported a greater increase in communication with others and a greater number of ways in which they were pursuing information about HIV and AIDS, compared to those in control schools. Pupils in target schools also relied more on schools and less on other sources for information about HIV and AIDS. Overall, school-based programming appeared to develop in pupils a motivation to pursue information on their own and to talk to family and community members about HIV/AIDS.

Modes of prevention

Teachers had a variety of sources of information about prevention teaching made available to them. These included texts and guidelines from the Ministry of Education, Science and Technology and additional books and resources provided as part of PSABH training. While the MoEST resources focused on abstinence, PSABH training provided teachers with information on the full complement of prevention approaches included in the *ABC and D* (Abstain, Be faithful, use a Condom, treat Diseases) approach.

Abstinence

Teachers held true to the community focus on abstinence as the only acceptable method of prevention. The main tactic used to reinforce the importance of abstinence was fear, i.e. if you don't abstain you will die of AIDS.

Despite this singular focus, pupil awareness that 'avoiding sex' was a way to remain safe from HIV did not increase over the course of the programme. Commitment to abstinence and confidence in an ability to act on this commitment, however, were present in a large proportion of pupils. At the same time, pupils also described sexual activity as beyond their control, citing multiple factors which pressured or forced them to engage in sex. In the face of these pressures, pupils asked for more concrete reasons for abstaining (e.g., if you abstain you can continue with your education and get a good job) and expressed a desire to be taught specific strategies for resisting the forces and pressures that propelled



them to engage in sex. While teachers felt confident that they were providing pupils with the tools they needed to remain abstinent, pupils expressed a need for more information and practical strategies for remaining abstinent.

There was evidence that significantly fewer pupils, who completed surveys at the six-month evaluation point, had initiated sexual activity compared to pupils who completed surveys prior to PSABH programming. This decrease was greater for girls than boys and was evident in both control and target schools. The absence of a significant difference between control and target schools in sexual initiation makes it impossible to credit this change specifically to PSABH. In further analysis, however, communication and pursuit of information about HIV and AIDS were found to be the main factors influencing the likelihood of sexual initiation. Since communication and pursuit of information were greater in target than control schools, the analysis demonstrated that these were the routes of PSABH's influence on sexual initiation.

It was evident from evaluation results that changing behaviours of those who were already sexually active was difficult. The likelihood that those with sexual experience had engaged in recent sexual activity was not found to have been influenced by either personal or school factors, by perceptions of pressure or force, or by the presence of HIV/AIDS programming in the school or community.

Condoms

Teachers continued to struggle with the issue of condoms, not knowing how or if they should talk about them to pupils. Based on the observations of zonal inspectors, there was, however, more evidence that condoms were spoken of in target than in control schools. When zonal inspectors provided examples of how the questions that pupils asked about condoms were answered, there was some indication that there was a greater variety of responses in target than in control schools. The content of messages delivered to youth, however, was most often negative, with the apparent intention of discouraging condom use.

Pupils were aware that their teachers were struggling over what to tell them. They provided examples of contradictory and false information that continued to circulate in their schools and communities. In the face of such contradictory information, they looked to adults for the 'truth', reasoning that this was something that they needed to know in order to protect themselves in the future. While schools had difficulty providing information about condoms, there was a hint that more positive messages about condoms might be coming from sources external to the school (i.e. older youth and

community members). Pupils with sexual experience appeared to be better able than those who were not yet sexually active to access or develop knowledge and attitudes supportive of condom use.

Generally, there was no significant change in condom use in either control or target schools, with the exception of a decrease in the percentage of control school girls who reported using a condom at last intercourse at the six-month evaluation compared to the pre-programme data collection.

Overview of effect of PSABH on knowledge, attitudes and behaviour

The effect of PSABH on pupils' knowledge, attitudes and behaviours related to HIV and AIDS is complex. At the interim evaluation stage, PSABH has had a direct and statistically significant effect on the uptake of HIV and AIDS programming in schools, with ample evidence that target schools have more diffused programming on HIV and AIDS than do control schools. PSABH also has a direct and statistically significant effect on pupil communication with others and independent pursuit of information about HIV and AIDS with pupils in target schools engaging in these more than those in control schools. To date, the bulk of the effect of PSABH on pupil knowledge, attitudes and behaviours related to HIV and AIDS is, however, primarily indirect, operating through school programming. Thus: 1) target schools have more programming in place than do control schools; 2) schools with more programming in place generally show better results in pupil knowledge, attitudes and behaviours; consequently, 3) PSABH training influences pupil knowledge, attitudes and behaviours through its influence on programming in the schools.

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