

PRIMARY SCHOOL ACTION FOR BETTER HEALTH



BASELINE RESULTS for FIVE NEW SITES VOLUME I of II

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LIST OF ABBREVIATIONS

DFID	Department for International Development
FGD	Focus group discussion
KAB	Knowledge, attitudes, behaviours
KCPE	Kenya Certificate of Primary Education
KIE	Kenya Institute of Education
MKFI	Mount Kenya formal Income Families
MoEST	Ministry of Education, Science and Technology
NFI	Nairobi Formal Income Families
NIS	Nairobi Informal Settlements
PSABH	Primary School Action for Better Health
UC	Urban Coast
UOW	University of Windsor
VCT	Voluntary Counseling and Testing
WKDPA	Western Kenya Densely Populated Areas

EXECUTIVE SUMMARY

Primary School Action For Better Health (PSABH)

Primary School Action for Better Health (PSABH) is an HIV/AIDS prevention programme for primary schools being delivered in Kenya by CfBT with Ministry of Education, Science and Technology staff. This report summarizes the results of baseline data collection in schools drawing students from five different regions of Kenya: Nairobi Formal Income Families (NFI), Nairobi families living in Informal Settlements (NIS), Families Living on the Urban Coast (UC), Mount Kenya Formal Income families (MKFI), and Western Kenya Densely Populated Areas (WKDPA). Following baseline data collection, the head teacher (or deputy head), 1 resource or senior teacher, and 1 community representative were trained in a week-long training session. This prepared the trained teachers to deliver training to their colleagues, provide HIV/AIDS education in the classrooms and deliver co-curricular activities in their schools. One term later, 2 additional teachers from each school will be trained using the same curriculum and methods. The training of these two additional teachers will help counteract the loss of trained teachers discovered in earlier evaluations of the PSABH programme.

Evaluation Design

Between November 2001 and October 2003, PSABH was evaluated using a community randomized cross-sectional trial with combined survey and interview methodologies. Data collected pre-programme (wave 1) and 18 (Nyanza) or 14 (Rift Valley) months after teachers were trained (wave 3), supported the conclusions that the programme was well received in schools and communities and compared to control schools, produced desirable changes in pupil KAB related to HIV transmission. While the impact of findings differed in scale and specific nature in the two provinces, in general they were similar in terms of KAB (See Appendix A for a summary of these results for Nyanza Province).

Twenty randomly selected schools from each of the designated regions that have a full complement of trained personnel (head teacher, senior teacher, and community representative trained in the first training period) are being used in the current evaluation phase. Because PSABH is being rolled-out to all schools in each region, it was not possible to use an intervention-control design.

The central question in this phase of research is:

Can PSABH be delivered and have a similar impact in schools in different regions that serve pupils from different ethnic groups?

Baseline Results From Five New Regions

Schools in the new regions presented a diversity of ethnic, cultural, economic and social profiles. Nairobi schools have a mix of ethnic groups which teachers claim make it difficult to teach about sexuality since traditions and expectations differ across the groups. UC schools have nearly 30% Muslim students and are also located in a tourist region. MKFI and WKDPA schools are rural, and together with NIS schools present a picture of poverty and the associated problems and pressures on youth. Among the regions are sizable numbers of pupils who are Mijikenda, Embu and Luhyia as well as the Kikuyu and Luo pupils already represented in Nyanza and Rift Valley. The diversity in schools will provide a good test for the transferability of the gains made by PSABH in the original regions.

Based on responses to baseline surveys it appears that teachers are already teaching about HIV and AIDS in classroom subjects. This is not surprising, given that the MoEST mandated one AIDS lesson

per week over 2 years ago and questions about HIV and AIDS are now included in KCPE. However, there are few co-curricular activities evident in the schools.

Teachers spoke extensively of factors that make youth vulnerable to HIV. These strongly paralleled factors that pushed or pressured them to be sexually active at a young age. Prominent on the list were poverty and the consequent push for girls to engage in transactional sex and for both girls and boys to make earning money a priority over everything else. Traditional teachings about sex and manhood, circumcision practices, alcohol, drugs, peer pressure and lack of control by parents, were also important factors in all regions. In the very poorest of regions teachers also spoke of the example set by parents, especially mothers who both engaged in prostitution and, in some cases, encouraged their daughters to do likewise. In these regions, boys were frequently involved in theft, drug selling, and other illegal behaviours. Unique to the UC schools was the presence of tourists and an air force base, both of which enticed girls into transactional sex.

Teacher knowledge related to HIV and AIDS is high, while that of pupils is not. Pupils do, however, display greater knowledge and better attitudes toward condoms than found in Nyanza and Rift Valley sites during baseline data collection. Pupils obtain most of their information from television and radio in urban areas and from other community members, friends and siblings in rural areas. Most schools have visitors coming in to teach about condoms.

Only small numbers of youth are sexually experienced in most of these sites. The smallest numbers are found in NFI schools where only 4% of girls and 15% of boys reported sexual activity. Boys in WKDPA, with 47% sexually active and UC with 35% sexually active, are in the same range as was found in Nyanza and Rift Valley. Girls in MKFI, with 20% sexually active, present the highest rate. In other regions, however, 20% or fewer of boys and fewer than 10% of girls report any sexual experience. Condom use is, however, usually lower than in Nyanza and Rift Valley, despite the greater knowledge and exposure to information about condoms and greater acceptance of condom use.

Emerging Issues

Several new and emerging issues were evident from the baseline data:

- Boys focus on earning money – through legal and illegal enterprises. Otherwise, especially in urban areas, they are idle.
- Girls obtain money from boys in exchange for sex. In the urban areas there was considerable talk of girls from poor homes engaging in prostitution. In the UC region this was connected to the availability of tourists and a nearby air force base rather than poverty.
- Except for the UC region where girls and boys may be involved in selling to tourists, girls have no access to income earning activities. They carry a large share of the responsibility for family and household tasks – which are generally not shared with boys. In some regions, teachers spoke of girls as staying late at school to avoid household responsibilities.
- Pupils are aware of VCT in their communities and of its purpose.
- In UC and NIS areas, pupils and teachers discussed the presence of intravenous drug use.
- With only the exception of boys in WKDPA schools, the reported sexual activity of pupils is very low. This is especially the case for girls, with fewer than 10% of girls reporting ever having engaged in sexual intercourse in most regions. With such low rates it is unlikely that they will be changed over the course of the intervention.
- Pupils in most regions are more articulate and relaxed in talking about sexual matters than was found in Nyanza and Rift Valley.
- Circumcision and expectations related to circumcision, especially for boys, are concerns of teachers in several communities.

- In all communities, teachers and community representatives commented on the plight of local orphans. These children are seen as especially vulnerable – often exploited by those who care for them, and often have to engage in risky activities in order to provide for their basic needs.
- Teachers cited a shortage of textbooks as a barrier to teaching. The presence of texts in the schools should be checked by zonal inspectors since all schools are supposed to have received books through the MoEST and KIE.
- A high proportion of pupils in all schools reported having been trained as peer supporters. It appears that there are several organizations training pupils to function as HIV/AIDS peer supporters.

INTRODUCTION

Primary School Action For Better Health (PSABH)

Primary School Action for Better Health (PSABH) is an HIV/AIDS prevention programme for primary schools being delivered in Kenya by CfBT with funding from the Department for International Development (DFID). The goal of PSABH is to create a positive behaviour change in upper primary school pupils to reduce their risk of exposure to HIV. This is done using a modified cascade approach to training teachers in the delivery of an HIV/AIDS education programme in standards 6-8. Based on positive evaluation results after 18 months of operation in schools in Nyanza and Rift Valley provinces,¹ a decision was made to expand the programme to more schools and regions in Kenya with continued monitoring of its delivery, sustainability, and efficacy in 40 of the original intervention sites (20 in Nyanza and 20 in Rift Valley) and monitoring of its transferability using 20 schools in each of 5 new sites:

- Nairobi schools that draw their student populations from families
 - With Formal Incomes (NFI)
 - Living in Informal Settlements (NIS)
- Urban Coast schools located in Mombasa and Malindi (UC)
- Mount Kenya schools that draw their student population from families with Formal Incomes (MKFI)
- Western Province schools located in Densely Populated Areas (WKDPA).

The central question to be answered using data collected in the five new sites is:

Can PSABH be delivered and have a similar impact in schools in different regions that serve pupils from different ethnic groups?

The question will be answered by comparing the implementation and impact of the programme in the five new sites to what has been obtained in Nyanza and Rift Valley. This document reports on baseline (pre-programme) results for the five new sites.

PSABH follows an action research model where the goal of the research is to both evaluate the project and identify new or emerging issues that need to be incorporated into programme content or delivery. Based on research during the 14-18 month evaluation in Nyanza and Rift Valley, the model of PSABH that is being delivered in the five new sites:

- Trains 2 more teachers than in the original model to address the loss and transfer of trained teachers.
The original model trained 1 head teacher, 1 senior teacher and 1 community representative in two one-week residential courses. In the new model, an additional two teachers are trained one term later using the same curriculum and methods.
- In addition to the standard training programme that has been delivered throughout PSABH's tenure, the new model trains teachers to:
 - Explore sexual scripting with youth and deliver messages that take these scripts into account;
 - Be alert to different levels of sexual maturation and insure pupils receive information and motivation to take risk reducing action that is appropriate to their level of sexual maturation;
 - Separate the delivery of factual information about condoms from moral education;

¹ See *Primary School Action for Better Health: 18 (Nyanza) and 14 (Rift Valley) Evaluation. Volume I of II*. Available at: www.psabh.info

- Use resources inside and outside the schools. Outside resources are used especially to deliver programme components which teachers feel unable to deliver.

The objectives of the baseline data collection that informs this report were to:

- Create a profile of the schools, teachers and pupils at each of the five new sites.
- Outline KAB patterns evidenced at the five new sites.
- Identify emerging issues that are evident in these new sites.

This report is based on data collected using surveys and FGD with a sample of teachers and pupils in over 20 schools at each of the five new sites.

Report Sections

Volume I of this report includes the following chapters and appendices:

- Overview of Research Methods
- Profile of Sites
- HIV/AIDS Teaching in the New Sites
- Knowledge of Teachers and Pupils about HIV and AIDS
- Pupils Actions in Pursuing Information and Communication About HIV and AIDS
- Pupil Attitudes and Behaviours Related to HIV Risk
- Conclusions
- Appendix A

Volume II of this report includes:

- Copies of surveys
- Copies of focus group guides
- Information on coding of variables and creation of scales (codebooks)

RESEARCH METHODS

With the additional funding provided by DFID to deliver the PSABH programme to a further 5000 schools during 2005, it was decided to monitor the implementation and effect of the programme in five new regions of Kenya using a pre-post design. This chapter reports on the methods used for this monitoring.

Monitoring Design

Twenty schools from each of the five new regions are participating in monitoring the efficacy of implementing PSABH in areas with different economic, ethnic and social characteristics than those in the original evaluation sites. Data were collected from teachers and pupils at each school before initiation of PSABH activities and will be collected 10 months after activities begin. Surveys with pupils and teachers, and monitoring instruments completed by zonal inspectors based on school visits are completed in each school. In addition, teacher focus group discussions were held at the beginning of teacher training. FGD with pupils in 4 schools in each region are completed pre and, along with in-depth interviews with trained teachers, 10 months post initial implementation of the programme.

Site Selection

Five regions of Kenya were identified for participation in this monitoring exercise. The objective was to select regions that were likely to provide a different profile of pupils and communities from each other and from the original research and evaluation sites in Nyanza and Rift Valley provinces. Based on consultation between senior staff at Steadman Research Services Incorporated and CfBT, it was decided to monitor the roll-out of PSABH in schools in Western Province, the region of Mount Kenya, Urban Coast schools in Mombasa and Malindi, and two groups of schools in Nairobi, those serving informal settlements and those catering primarily to pupils from formal income households. It was felt that these regions provided different economic, ethnic, and socio-cultural profiles and would constitute a test of the efficacy of transferring PSABH to different regions.

Lists were made of all schools that sent a full complement of representatives (1 head teacher, 1 resource or senior teacher, 1 community representative) to Course A of the PSABH training session in their region. Schools were randomly selected for participation in the research from the lists created for each targeted region. Schools were over-sampled at baseline to accommodate potential attrition over the 10 month period.

Survey Administration

Teachers from selected schools completed surveys before beginning their training and a selection of teachers and community representatives also participated in a focus group before training. In January 2005, the first month of the term that teachers began PSABH activities in schools, all standard 6 and 7 pupils in the selected schools also completed surveys and 5 boys and 5 girls from 4 schools in each region participated in separate focus group discussions. Surveys were administered in English and the dominant ethnic language of the area (Luo, Kikuyu, Swahili) and focus groups were also conducted bilingually. These data collection procedures will be repeated in October 2005 with teacher surveys implemented in the schools and in-depth interviews of teachers held at the schools selected for FGD with pupils.

Data Handling

Steadman Research Services Incorporated organized pilot testing and translation of the surveys to the dominant ethnic languages (Luo, Kikuyu, Swahili), data collection and data entry. Their multi-lingual staff conducted surveys with pupils and teachers, and focus groups with teachers, community representatives and pupils. Records were maintained of field situations and unexpected circumstances. Steadman personnel entered all survey data into SPSS databases and translated and transcribed FGD. All data and transcripts were transmitted to the UOW for analysis. Senior staff at Steadman also consulted with senior staff at CfBT and the UOW on data collection instruments, research design, and interpretation of results, contributing their many years of field experience to insuring the research design was feasible, the questions reliably and validly tapped the desired information, and local contexts or meanings were reflected in the interpretation of results.

Research Design, Data Analysis and Reporting

Dr. Eleanor Maticka-Tyndale, Canada Research Chair in Social Justice and Sexual Health at the UOW (Canada) was responsible for research design, data analysis, and completion of reports. Data collection instruments and data collection plans were developed in collaboration with senior CfBT and Steadman Research staff in Nairobi. Close contact was maintained through email and periodic meetings and site visits in Kenya to deal with any unexpected field situations, interpretations of results, and implications of results for programme modifications.

SPSS was used in survey analysis and Scolari N6 for analysis of interviews and focus groups.

Measurements

Two sets of survey measurements were used in analysis. The first set consisted of direct responses of pupils and teachers to questions on surveys. The second consisted of scales and composite measures created by combining responses to clusters of questions dealing with the same topic. Before creating scales or composite measures, clusters of questions were tested using factor and reliability analysis to ensure pupils and teachers were responding to questions in a way that justified combining them.

In-depth explanations and discussions evidenced in the transcripts of interviews and focus groups were also used to produce community profiles, in-depth, subjective measurements of knowledge, attitudes and behaviours related to HIV transmission, and to identify emerging issues within schools and communities that were not covered in questionnaires. Where conclusions based on questionnaire responses and interview or focus group discussions differed, these were examined in greater detail to identify potential conditions or mediating factors that might influence the interpretation of questionnaire results. Discussions with those more familiar with Kenyan youth and schools (e.g. Steadman research staff, CfBT staff, and lead trainers and teachers), and examination of other research conducted with youth in Kenya and other subSaharan African countries contributed to this process.

Data Analysis Procedures

Survey Data

There were two stages to survey analysis:

- (1) Data checking to verify the validity and reliability of data and whether variables met the assumptions of statistical analyses. Modifications of variables, or exclusion of some variables was based on the results of data checking.

- (2) Preparation of conditional frequency distributions for responses of pupils and teachers to survey questions comparing the five new sites and, where relevant, responses to these questions at baseline in Nyanza and Rift Valley.

Textual Data

Analysis of textual data was facilitated using Scolari N6 Software. Qualitative data analysis focused on two areas:

- (1) Creating a profile of communities in each region and of the lives of pupils, specifically focusing on potential factors contributing to or protecting against vulnerability to HIV in communities in each region.
- (2) Elaborating on and clarifying responses to survey questions and the thought process and meanings that influenced answers.

Triangulation

All forms of data were combined in developing the analysis and conclusions in this report.

PROFILE OF COMMUNITIES AND LIFE OF YOUTH

This chapter is based primarily on FGD with teachers and community representatives who attended PSABH training and with pupils in standards 6 and 7 from four schools in each region. Pupil and teacher responses to self-descriptive questions on surveys are also used in creating each profile.

Nairobi – Formal Income Families (NFI):

The bulk of children in Nairobi attend schools that serve families with formal incomes (i.e. from some regular form of employment). Sampling cut across all sub-locations in Nairobi with only schools servicing informal settlements (e.g., Kibera, Mathare) excluded. However, some children from informal settlements and lower income levels may also be found in the schools in this grouping.

Pupils responding to surveys in this region came from three dominant ethnic groups: Kikuyu (34%), Luo (22%) and Luhya (20%). Almost all described themselves as Christian (95%). Pupils in standards 6 and 7 in these schools had the youngest mean age (12.58 years for boys and 12.13 for girls) of all the regions surveyed. Teachers were predominantly Kikuyu, with the schools staffed by more than 3 female to every one male teacher (F:M ratio 3.30).

General Description of Communities Served by Schools

There appears to be a wide range of living situations for pupils attending these schools, including:

- government housing;
- one roomed houses (children sleep under beds or on floor);
- a centre for street boys;
- living with extended family members;
- family homes with servants and separate bedrooms for children.

Teachers also commented on the ethnic diversity in their schools. This made it difficult for them to deal with issues of sexuality and maturity since these were approached differently in different ethnic groups.

Both teachers and pupils reported that in homes with housemaids and/or houseboys, pupils had little responsibility for chores and their time was spent primarily on self care, school, friends, and recreation. Boys often reported watching television both before and after school.

Where space in the home was limited, cooperation between families provided a space for the separation of boys and girls at bedtime – boys sleep together in one family home, while girls were sent to another. Children sometimes needed to sleep at a neighbour's home when there were guests in their own home.

School Day

Some children were driven to school by parents while others walked. Teachers from one school commented that their school provided transportation for those who lived farthest away.

Various arrangements were made for the midday meal. Pupils went home for lunch, bought lunch from the surrounding area, were given lunch through a school programme, or had parents drop food off for lunch.

Boys and girls seemed to have similar duties at school with respect to maintaining the compound.

Teachers commented that some girls preferred to remain at school during lunch to avoid teasing by boys and to stay after school to avoid doing their chores at home, particularly when they felt there was an unfair distribution of chores between themselves and the boys in their home.

We also have some girls who remain in the school playing some other game and basically they know they are the only ones who have been engaging with the jobs in the house. Not that they like it because they see their brothers do not have much work (W1NFIT1:450-453).

Activities Outside School

Teachers and pupils agreed that most boys had a lot of leisure time which they spent playing or watching television. Teachers were particularly concerned with boys who were frequently seen hanging onto matatus outside of school. Although some boys lacked responsibility and expected to be served, others were required to do cooking, watch/protect younger siblings and/or help the family sell goods.

Regardless of the financial situation of the family most, but not all, girls were taught and expected to take responsibility for the 'female type' jobs at home. In one focus group teachers actually debated about whether boys were able to assume some of these duties – one teacher/community representative argued that males were unable to do chores that required bending because they tire quickly (W1NFIT1:483-524).

Activities of Youth to Earn Money

Apart from mentioning that boys sold papers during holidays, there was little discussion about children earning money. Some teachers were concerned that both boys and girls were involved in brewing and/or transporting ethanol for money and some were being taught how to handle drugs. Neither of these was mentioned in the pupil focus groups. According to pupils, if girls needed money or material goods, these could be obtained through boyfriends, but they must be exchanged for sex. Boys mentioned that they were able to obtain funds from their parents to at least purchase lunch on a regular basis.

Community Expectations

Children attending NFI schools come from diverse ethnic backgrounds. Teachers commented that this meant there were multiple variations identifying when a child was considered 'mature,' at times making it difficult for teachers to teach topics related to maturation or to deal with youth because of the different expectations based on whether a child is considered to have passed an age of 'maturity':

You cannot go to parade and say "this is the way you are supposed to do." Maybe now we can talk from the syllabus and from the scientific point of view about what the age is when a child is mature. That is as the teacher in Nairobi is concerned (W1NFIT1:817-820).

Teachers commented that some girls have weekly clan lessons on sex and sexuality. This was not evident in pupil focus groups.

Factors Contributing to Vulnerability to HIV and AIDS

Participants from all focus groups were asked to reflect on what they felt contributed to youth vulnerability in the communities that their schools serve. Poverty was identified as a primary source of vulnerability.

Some parents use the girl child for material gain and have sold daughters into prostitution. Girls frequently use sex to provide them with basic needs because their parents do not.

Pupils suggested that the excessive use of drugs, alcohol and bhang frequently resulted in playing sex and therefore increased young people's vulnerability. The idleness of many boys in this region was also seen as contributing to risky behaviour.

According to teachers and community representatives, the practice of incorporating many individuals in the family structure and giving them the status of 'uncle' or 'aunt' creates potentially problematic relationships between children and visitors.

Anybody who comes in a house is either an aunt or an uncle and therefore these girls or the boys think that you are very harmless because they are his/her uncles (W1NFIT1:781-783).

Concern was also expressed for pupils who cared for sick parents without knowing that the illness was AIDS-related and about whether clinics took the time to properly sterilize instruments.

One school reported a high prevalence of used syringes and used condoms in the school compound from nearby clinics or drug users.

According to teachers and community representatives, the attitudes of some parents also contributed to the vulnerability of youth. Overall, parents were thought to care less about the sexual activity of sons than daughters. Single mothers, in particular, were said to encourage their sons to be sexually active. Fathers, on the other hand, were said to be more cautious and concerned about possible pregnancy and whether a daughter was ready for marriage.

Although some pupils did suggest that parents were not particularly worried if their children played sex, most believed that parents would react violently, beating the children or sending them away.

Parents can beat you up.

They can light fire on you and you die there.

They go and buy a whip to beat you.

They will tell you to remove all your clothes and you are tied to a tree and whipped. They don't even care where they hit (W1NFIBoys1:249-254).

Nairobi – Informal Settlement Catchment Area (NIS)

These represent some of the largest schools in Nairobi today and have children who face different challenges than those in other schools. Schools in this group served Mathare, Kawangware, Mukuru kwa Njenga, Kibera, Kariobangi North, Kagemi, and Viwandani. These regions are typically referred to as 'slums' in the local vernacular. Schools were only included in this group if the majority of their students came from an informal settlement area.

Pupils from NIS schools who completed surveys came from three dominant ethnic groups: Kikuyu (36%), Luo (24%) and Luhya (19%). Almost all described themselves as Christian (92%). The average age of boys and girls in standards 6 and 7 in these schools was 13.03 and 12.60 years respectively. Teachers were predominantly Kikuyu followed by Luo and Luhya, with the schools staffed by more than two female to every one male teacher (F:M ratio 2.26).

General Description of Communities Served by Schools

According to teachers and community representatives, issues associated with poverty were the most extreme in schools servicing the NIS. This had significant implications for the life of children. Pupils were frequently late because they were waiting for their mothers to come home and make breakfast. Many pupils were not properly dressed in uniforms, some stole lunches from others out of necessity.

Pupils who lived in one room homes at times found they were unable to go home after school because their mothers were working:

In the slums where do people get work, men will start work at 5am so these men are expected back at 5pm so at 5:15pm the business of Changaa begins the business of prostitution. So if you have a son and two daughters and you are in a one room, so these children know that this is the time mum makes money. (W1NIST1:380-384).

Orphans were particularly evident in the informal settlement areas of Nairobi and could be found during school break times in the town begging.

The availability of inexpensive 'fake' gameboys and other technological equipment, and of inexpensive domestic labour was evidenced in boys' discussions of playing with gameboys and play-stations and of the presence of household servants. Videos and television were common ways in which boys and girls learned about and claimed to be encouraged to explore their sexuality

School Day

Pupils walked in groups to school for protection.

The big ones protect the young ones. They prefer to be late rather than leave their young sisters or brothers behind (W1NIST1:277-278).

Some took matatus on a daily basis, costing 20 shillings each way.

Those who attended school often had to be chased away at the end of the day or they would stay until late (7pm).

According to teachers and community representatives, some pupils wore inappropriate clothes under their uniforms (i.e., tank tops), or exploited their uniforms to get away with some things (i.e., police tended to give them slack).

Not all parents valued education. Earning money took precedence:

...they have no time to do their homework because of the work they do at home. In fact this year there is one who did not do KCPE because the father told him to go and get employment as a gardener...the boy has the will to learn but the parents do not see the need for education (W1NIST1:209-216).

Activities Outside School

Girls often took the place of their mothers – caring for family or running a business (e.g., sale of changaa); some girls sold goods until late in the evening while mothers were busy with other work. Discussions with pupils suggested that when girls had leisure time it was spent playing games – 'Kati', 'hop scotch' and football – and on personal grooming (some bathed/showered multiple times a day).

Most of the boys indicated that they also engaged in household chores, and spent their leisure time playing – usually football.

Activities of Youth to Earn Money

According to teachers and community representatives, the need to earn money drove almost all activities of youth in these schools. Teachers commented that many youth would not do anything unless it earned them money. Pupils had stolen textbooks, or other school supplies to sell for money. Some pupils had money from drugs and there were problems with illicit brew in many communities.

Parents also focused on earning money. Boys and girls were frequently required to do work before and after school.

In sum:

Those children in the slums they have three things they do not forget: sex, money, drugs. In sex you get money, in drugs you get money. Whatever they do there it must bring money. Anything which is not bringing money is not worth doing (W1NIST1:345-348).

Community Expectations

Pupils, teachers and community representatives generally believed that parents were not overly concerned with the sexual activity of their children:

There now depends with the parents. But in most cases like the slums, like we have explained, the parents do not care (W1NIST1:684-685).

Some can keep quiet even if they know their daughters are having sex, as long as they don't get pregnant (W1NISGirls1:211-212).

Some parents are careless, they don't care where they leave their sons and daughters (W1NISGirls4:238-239).

Factors Contributing to Vulnerability to HIV and AIDS

Teachers commented that the example set by parents could be problematic:

An African man is believed to be polygamous but if I happen to suspect my mum I think that is risky to us. That is the way we were brought up. The boys if they see this they will start sleeping out and in the end they will run away (W1NIST1:370-375).

In informal settlement areas parents are working, leaving children unsupervised at night. Some parents used children, especially girls, as prostitutes:

You know what was happening there are some parents who use their children especially the girls as sex culprits. If they are probably three girls the parent will tell the girl that today is your turn you have to go and bring money (W1NIST1:625-628).

According to pupils, unemployment and poverty pressured young people into transactional sex:

They can get AIDS when they don't have money and they sell their bodies for money because nowadays it is not easy to get employment (W1NISBoys4:715-716).

Yes because maybe you are in school but your parents are too poor to afford fees. Widowers whose husbands had died agree to help you in return with sex and if you refuse you loose the financial assistance (W1NISBoys4:746-748).

Teachers commented that some parents were excited that their children were playing sex and were particularly proud of boys. Fathers tended to be more protective of girls and were less likely to be happy if girls were playing sex. They felt as though their daughter is 'spoiled'.

Pupil focus groups in this region were the only ones to mention the potential vulnerability related to intravenous drug use:

When the group he walks with inject themselves with drugs using the same needles it may spread amongst them (W1NISGirls1:493-494).

Urban Coast (Mombasa and Malindi) (UC)

Schools in this group were drawn from Mombasa and Malindi. Mombasa schools are all urban, while those in Malindi include some rural schools. Malindi in particular is a location known for its 'beach boy' culture. The population in this region has the highest Muslim concentration and is strongly influenced by Swahili culture.

Pupils in these schools who completed surveys came primarily from the Mijikenda (44%) ethnic group, with nearly 20% identifying as Luo. These schools had the largest complement of Muslim students (29%), with only 71% identifying as Christian. In some schools over 50% of pupils were Muslim. The average age of boys and girls in standards 6 and 7 in these schools was 13.48 and 13.05 years respectively. Teachers, like pupils, were also predominantly Mijikenda, with the schools staffed by more female than male teachers (F:M ratio 1.63).

General Description of Communities Serviced by Schools

Pupils came from a predominantly urban environment, with more money available to them than in the rural schools included in this research. Their proximity to beaches increased their exposure to tourists. Some children had their own bedrooms; others slept at a friend's house or at a grandparent's house. Boys were able to start making their own homes as early as standard 6.

In focus groups boys described their typical day as including chores at home. For boys these were primarily fetching water and assisting siblings (at least one involved in household chores because mother is sick); whereas girls focused on cleaning, washing and cooking. Otherwise there was talk of playing, going to the beach, and, for boys, stealing. Teachers and boys alike agreed that boys had considerable idle time.

Teachers and community representatives expressed concerns that parents abdicated their responsibility for the children's sexual activity:

According to African tradition it [playing sex] was wrong but the parents of today do not want to carry the responsibility therefore they just send the child to school so that when they get married it's the child who will be blamed (1656-1658).

School Day

Pupils walked, were driven, bike or took matatus to school. They most often traveled with peer groups or siblings, but some traveled alone. Many left the school during lunch with girls and boys in focus groups commenting that they often went to the beach together during lunch.

Some girls stayed after school to practice the skills they learned in Girl Guides. Others went home to do chores.

Because this is an urban environment, there was concern about outsiders in the compound so pupils were chased out of the compound before teachers leave.

Activities Outside School

According to teachers and community representatives, in the urban regions families have servants, leaving boys idle. The boys use this time to play video games or watch videos. Boys in the rural areas were also idle because there are no animals to care for so they spent their time swimming, fishing or playing. The culture here has girls doing most of the work.

Girls were considered to be more reliable so parents frequently used them as messengers.

Teachers described young people as spending time at discos, watching videos, visiting beaches, drinking beer or involved in church activities. Pupils also included playing football, walking on the beach, and fighting among their out of school activities.

Activities of Youth to Earn Money

The high prevalence of tourists in some areas provided opportunities for young people to make money selling goods. For example, boys caught and sold lobsters, girls sold french fries (using supplies from mothers), traditional necklaces, coconut beer, or shoes. It also provided an opportunity for drug trafficking and prostitution.

There are others who say they are doing prostitution they put on short clothes and go out to look for white people on the beach (W1UCMGirls1:495-496).

Some boys stole textbooks to sell to other schools, others got money playing cards/gambling.

Community Expectations

Youth were expected to wait until marriage or at least until they had reached their basic life goals before they initiated sexual activity. Teachers and community representatives debated about the specific age. Some said marriage was expected after 18 years, others suggested girls waited until 20-26, boys until 26-30. However, teachers also commented that Muslim families followed a tradition of marrying their daughters early. Some girls in class 8 had been married by force, although this practice is decreasing.

Youth were expected to have family values and life skills as defined by what was necessary in marriage – females cook, are respectful to mother-in-law, knowledgeable about money, religious. Once they could display these values they were ready for marriage and playing sex.

Traditionally young people were taught about sex through informal education and became adults following circumcision (both boys and girls). Formal education has distorted this pattern.

Parental views and responses to their children playing sex varied. One parent was described as responding to complaints about their child playing sex with the comment that the two children would marry, so let them play. Other parents, however, were stricter, and would chase the child away or beat him/her. Pupils suggested that parents who were more moderate, talking to and/or warning their sons and daughters, would simply be ignored.

Factors Contributing to Vulnerability to HIV and AIDS

In focus groups, teachers and community representatives listed many factors that contribute to youth vulnerability, including: discos, wedding dances, funerals, caring for PLWAs, poverty, the nearby air force base, sharing razors to sharpen pencils, or pins to pierce ears. They also expressed concerns that witchdoctors use unsterilized objects.

Several teachers and community representatives felt that faced with poverty mothers encourage daughters to have sex to get money:

Because of poverty you see some mothers who encourage their daughters to engage in sex so that they can get money to buy food for the family (W1UCMT1:770-771).

...a single mother is a prostitute, when she does not have any customers she asks the daughter to go and look also for men because she is a lady (W1UCMT1:874-876).

Pupils confirmed the presence of a relationship between poverty and sex:

Poverty is the main cause of having sex in schools because money is used to induce pupils to have sex (W1UCMBoys1:266-267).

If a friend finds you sitting somewhere she will come and ask you why you look stressed. So she will tell her if they can go and do prostitution so that they get money. Then she will tell you that you should charge like 10,000 shillings² for an hour (W1UCMGirls4:369-373).

Problems with drugs and alcohol were also commented on:

...drug and alcohol in schools are there so when students observe the people who misuse them, they will also join them (W1UCMT1:1258-1259).

Pupils also felt that the use of love potions made young people vulnerable:

Love potion is the key to having sex. Sex comes automatically when love potion is put into a girl's food or drink (W1UCMBoys1:191-192).

Mount Kenya – Formal Income Families (MKFI)

This is an agriculturally based community with 1-2 locations known for growing and shipping miraa. It includes schools in Meru, Nyeri and Embu municipality. There are two types of schools in this region, those with primarily boarding students and those within the community. Two FGDs were held with teachers in order to more fully understand these two types of settings. The pupil focus groups were conducted in schools which are within the community.

There was no clear division in the schools between these two groups. Pupils were predominantly Kikuyu (54%), although a sizable proportion were also Embu (42%), with 95% reporting they were Christian. The mean age of boys and girls responding to the survey was 12.86 and 12.93 respectively. Teachers were predominantly Kikuyu or Meru and a near even proportion of female and male (F:M ratio 1.08).

Day Schools in the Mount Kenya Region

General Description of Communities Served by Schools

Poverty has led to a struggle for money in many of the families in this region. Although many in the community (including pupils) could work in the quarry, they don't make enough money so that single parents (typically mothers) were frequently forced to search for other forms of income selling whatever they would sell. As one teacher commented, "*whether there is AIDS or not*" (W1MTKT1:407-8).

Boys slept in cubicles, free and alone. After circumcision they did not sleep in their parents' house. Girls slept in homes with their parents, although some were able to sneak away and some had left permanently. At times, girls went for Kesha (overnight prayer fellowship).

In focus groups, boys and girls described family chores. For boys these included herding cows, fetching water, farming, caring for goats and rabbits. For girls these were preparing meals, helping with younger siblings, setting fire, and cleaning house. Only boys spoke of games with friends, including playing football, handball, volleyball, chase. Some boys spoke of having 'guardians' who took care of chores. In one group, boys talked about playing sex as a regular activity.

² This amount of money would be equivalent to one month's wages of a domestic worker.

School Day

The majority of pupils lived within a 5-20 minute walk to school; however, at one school pupils could take 30 minutes or more to get to school. Those who lived farther away frequently ran to school and often became long distance runners for the school. Some pupils were able to get a ride to school with parents.

Young people walked in groups to school. These may be mixed-sex groups; however, some upper primary girls preferred to be in girls-only groups in order to talk about boys and/or the changes they experienced.

One of the schools had a lunch programme. Otherwise, not all pupils stayed at school for lunch.

Chores were relatively evenly divided between both girls and boys at school. Both did sweeping and cleaning of the compound.

Activities Outside School

Teachers reported problems with boys stealing money. Boys also hunted; played cards or pool during spare time.

Responsibilities before school were divided by gender with girls taking care of the family (particularly in single parent homes where the mother is frequently absent), while boys cared for animals or fetched water.

During their leisure time, some girls would sneak away to visit friends, but in the process, may need to help them with their chores.

Activities of Youth to Earn Money

Boys worked in the quarry or for sellers at the market.

Community Expectations

Youth were expected to wait until marriage to play sex. Marriage occurred once school was completed; however, girls frequently didn't go beyond primary.

According to pupils, the primary response of parents to children playing sex was to pass off responsibility to others including the head master, teachers, police and/or the chief. When parents dealt with the situation on their own, it was usually through dialogue and warnings, which the youth ignored.

Factors contributing to Vulnerability to HIV and AIDS

Teachers commented that circumcision practices, particularly when instruments are not properly sterilized contribute to vulnerability. In addition, boys are often taught that they must play sex once they are healed -- it doesn't matter with whom – which makes them careless..

You are told once you are healed you get a lady or they can get for you and the one who will be readily available is a prostitute (W1MTKT1:587-8).

The presence of needles used for IDU was also raised, but teachers stressed that the pupils themselves only use marijuana and alcohol, and not intravenous drugs. However, these still contribute to loss of control.

Puberty was also raised as placing youth at risk.

When they are noticing the changes in their bodies and they want to prove they are men and women (W1MTK1:615-6).

Pupil focus groups suggest that girls can be surprised by boys and men, pinned down and forced to have sex.

Boarding Schools in Mount Kenya Region **General Description of School Life**

Boarding schools draw their pupils from geographically diverse regions, including some international students. The boarding pupils were dropped at the beginning of the term and cared for by the school. Parents had little contact with them. In some cases parents were late or even failed to arrive to pick up their children for holiday periods. One participant reported having to care for a pupil for a day until someone could be located to take responsibility.

FPE and orphans have placed a strain on the resources of some schools. In at least one case a lunch programme was dropped.

Pupils tended to be above middle class and therefore were likely to have their own rooms at home. Class 7 & 8 boys frequently slept in their own structures.

There was the expectation that girls were more responsible and were therefore called on to care for their younger siblings, including when they were sick at home.

School Day

Day students frequently walked to school. One school provided a bus for day pupils. Teachers from one school commented that girls did not mix with boys and were resistant to sitting near them in school. But girls were aware of the activities of the boys and reported them to teachers.

Day pupils went home for lunch in some schools, others brought lunch.

Activities Outside School

There were limits to what boarding pupils could do outside the classroom. Parents expected a certain level of strictness in the school.

Pupils participated in clubs, had games or spend time cleaning school compound. Some schools had farms where pupils work. Locally, boys liked to go to videos and drink tea at hotels. There were problems with local brew and pupils were known to get drunk.

Girls tended to be closer to aunts.

At home boys assisted with the farm, helped with the business, and sold water. Young people also reared rabbits or chickens for sale.

Community Expectations

There was the general expectation that pupils should wait to play sex until they had finished primary and secondary school, had entered puberty, and had a job.

Factors contributing to Vulnerability to HIV and AIDS

Teachers discussed the unhygienic traditional circumcision practices in some areas (in others boys are circumcised in hospital) and the practice of female circumcision by Muslims, especially with young girls. There are also problems with piercing – tongues, tummies, ears -- and with tattooing. Drinking local brew leads to careless sex; night prayers at churches were seen as problematic as were video shows and discos. Poverty, child labour and unsupervised children were thought to be particularly vulnerable. Urbanization was credited with increasing contacts among youth and the associated potential for boy/girlfriend relationships.

Housemaids were available to boys and house boys took advantage of girls by buying them what their parents won't.

Just to add something it is very important for parents to take care of their children especially the daughters like if they want you to buy them something don't refuse (W1MTKT2:860-862).

Some single mothers were said to 'share' their friends with daughters.

Teachers believed that there are very few pupils who were sexually active in the boarding schools but that the percentage is far higher in neighbouring schools.

The case of a teacher was raised. One school girl was found with condoms she obtained from a teacher who was also seen in a bar with 3 female pupils

Western Kenya – Densely Populated Areas (WKDPA)

This is a predominantly rural, agriculturally based but heavily populated region.

The vast majority of pupils in these schools are Luhya (95%) and Christian (98%). Boys are, on average, 14.10 years of age and girls 13.53. All but two teachers in these schools were also Luhya. This region had the smallest proportion of female as compared to male teachers (F:M ratio .79).

General Description of Communities Served by Schools

In this region, boys were responsible for milking cows and delivering milk to the market. Girls also delivered soil to market for sale prior to class. Poverty required boys and girls to earn money in order to purchase food.

In focus groups, girls and boys described their typical day as including household chores. For girls these included sweeping, cleaning clothes, getting water, cleaning utensils, preparing meals, collecting firewood, feeding cows, and helping with younger siblings. For boys, chores included herding cows, fetching water, farming, washing clothes, caring for goats, chickens, and rabbits.

Girls also commented that boys and girls played games (e.g., hide and seek), and helped each other with duties and at times stayed behind and played love/made love

Small homes meant that children experienced parents playing sex. Some boys slept in cottages where available, others in homes or with neighbours. Boys who lived in homes where illicit brew was made had a poor attitude toward school because they had money. Having money made it easier for boys to lure girls.

Teachers expressed concern that parents did not give children work and therefore they were idle and roamed. This was more likely to occur with boys as girls had many chores and would choose to stay at school to avoid work. Generally, children were left idle, or unsupervised.

Most of the time the parents do not monitor their children because most of the time they have to be out looking for how they can feed their children (W1WTKT1:483-485).

Traditional beliefs including circumcision, funerals and young people meeting at night were also problematic. During funerals, the bereaved family members were shaved:

But even those funerals the shavings of the hair people do not use different razor blade they still use the same razor blade for different people (W1WTKT1:564-566).

School Day

Pupils described taking 5 minutes to an hour to get to school. One boy suggested that he must travel 5 km to school each day. Although most walked or ran, some were able to ride their bikes.

Girls tended to walk to school in groups as a protection against boys who might terrorize or otherwise take advantage of them.

Girls cooked for teachers. They were described as exploiting this opportunity by inviting friends to eat with them. Other pupils indicated that they were responsible for helping maintain the school compound.

Some pupils went home for lunch while others stayed at school because there was nothing to eat at home or they were trying to avoid chores. Some disappeared to play or gamble.

Boys were reported to bring pornographic pictures to school to distract each other.

Activities Outside School

Boys and girls suggested that, after completing their home chores, they spent their leisure time reading and playing games.

Concerns were expressed by teachers and community representatives about excessive drinking, including by pupils, and also about the availability of video shows. Boys were able to attend these when parents were not strict, not around or when they were orphaned.

Some children were able to stay out most of the night and could get caught up in going to discos or funerals, dancing, smoking, and using marijuana.

Activities of Youth to Earn Money

Pupils found odd jobs to earn money, including collecting and selling grass during school, or growing and selling vegetables. Some pupils were known to steal from shopkeepers or parents. Parents complained to teachers about this and admitted that their children were beyond their control.

Girls were able to get boys to steal sugarcane for them.

Community Expectations

The Tiriki community was described as expecting young people to know how to play sex during the initiation period. During initiation, the boys are isolated and spend time praising manhood. Afterward they become interested in girls and learn about sex by chasing them.

They do not teach about sex. You see when they are there, they sing songs of praising a man. Those songs talk about what the boys should do (W1WTKT1:596-598).

After circumcision, boys were considered to be men and can play sex – in one community they had to stop circumcision because it was being performed at age 4 and the boy was considered a man.

Like in my community we have stopped this traditional way of circumcision they circumcise boys even when they are at the age of four years. A child of four years he is taken to the hospital circumcised then from there we call him a man. I don't expect him to marry because he is still below 15 (W1WTKT1:618-621).

Girls were expected to wait to play sex until after marriage. Boys were expected to wait until they were 18 years old and had a cottage before they married, but generally experimented with sex prior to this (W1WTK1:626-627).

Parents expected their children to finish school and this became the focus of warnings about playing sex.

*He will be told he should go marry because that is what he wants.
At school we don't have husbands and wives we have pupils (W1WTKBoys2:570-571).*

Factors contributing to Vulnerability to HIV and AIDS

Pupils expressed a concern about the use of drugs and alcohol leading to sex:

Drugs like beer, cocaine and when they get drunk someone can have sex with them without her knowing (W1WTKBoys2:684-685).

Poverty and the desire for money also plays a role in making young people vulnerable.

Some landlords do not accept rent from ladies who live in their houses but in place of collecting rent from them they have sex together (W1WTKGirls2:503-504).

Some boys tell girls that they come from rich families, they give them money and the girls just give in (W1WTKGirls4:391-392).

Summary Tables

Table 1: Demographic Profiles of Pupils in Five New PSABH Sites

	Region						
	NFI	NIS	UC	MKFI	WKDPA	Nyanza wave 1	Rift wave 1
N =	1935	2460	2261	1423	1795	6801	3502
Age							
Boys N=	1004	1196	1082	696	845	3360	1658
Range	11-16	11-16	11-16	11-16	11-16	11-16	11-16
Mean	12.58	13.03	13.48	12.86	14.10	14.34	13.93
Std. Dev.	1.12	1.14	1.28	1.20	1.32	1.28	1.30
Girls N=	931	1264	1179	727	950	3441	1844
Range	11-16	11-16	11-16	11-16	11-16	11-16	11-16
Mean	12.13	12.60	13.05	12.93	13.53	14.16	13.53
Std. Dev.	.936	1.02	1.26	1.25	1.25	1.27	1.24
SES							
Mean	8.70	7.90	7.61	6.82	5.73	5.62	6.72
Ethnicity							
Luo	22.1%	23.6%	19.6%	.4%	3.6%	57.1%	5.0%
Embu	1.2	.7	.7	41.5	.4	--	--
Luhya	19.9	18.5	11.6	.2	95.2	1.6	6.5
Meru	1.7	1.7	.9	1.1	.1	--	--
Kikuyu	34.1	35.9	7.6	54.4	.5	--	71.0
Mijikenda	1.9	1.2	44.1	.4	.1	--	--
Kisii	4.2	4.9	1.5	.1	.1	36.5	3.0
Kalenjin	1.8	.5	.4	.1	.2	--	11.3

	Region						
	NFI	NIS	UC	MKFI	WKDPA	Nyanza wave 1	Rift wave 1
N =	1935	2460	2261	1423	1795	6801	3502
Religion							
Christian	94.7%	91.7%	70.7%	94.7%	98.0%	--	91.8%
Muslim	3.4	8.2	29.1	4.5	1.1	--	.0
Other	1.9	.2	.3	.8	.9	--	7.8

Table 2: Demographic Profiles of Teachers in PSABH Roll Out Sites

	Region						
	NFI	NIS	UC	MKFI	WKDPA	Nyanza wave 1	Rift wave 1
N of teachers surveyed	43	49	50	48	50	440	121
N of schools	24	25	25	24	25	158	40
Role played by teacher in the school (n.b. teachers may play multiple roles)							
Head Teacher (HT)	16	22	19	20	22	83	28
Deputy Head (DT)	4	2	6	6	4	90	22
Primary Teachers Standard 1- 5	8	12	9	14	17	155	36
Primary Teachers Standard 6-8	13	15	18	17	11	226	55
Guidance counselor/ Assistant Teach/ Senior Teach	5	1	1	6	5	21	6
N of schools with HT or DHT surveyed	19	22	24	24	24	132	40
N of schools where 1 teacher surveyed teaches only STD 1-5	2	5	7	6	5	43	16
Gender							
Males	10	15	19	23	28	325	77
Females	33	34	31	25	22	155	44
F:M ratio	3.30	2.26	1.63	1.08	.79	.47	.57
Ethnicity							
Luo	5	9	5	1	1	NA	6
Kisii	1	1	1	0	0		4
Luhya	6	11	7	0	49		11
Kuria	0	0	0	1	0		0
Meru	2	1	3	17	0		0
Embu	0	1	0	6	0		0
Miji Kenda	0	0	19	0	0		0
Kikuyu	22	22	4	23	0		70
Taita	0	0	5	0	0		0
Kamba	5	4	5	0	0		0
Pokomo	0	0	1	0	0		0
Kalenjin	1	0	0	0	0		30
Suba	1	0	0	0	0		0
Religion							
Christian	42	48	44	48	50	435	117
Muslim	1	1	6	0	0	1	0
Other	0	0	0	0	0	4	4

Several observations can be made about the schools and teachers who completed surveys at the beginning of their PSABH course A training:

- In 10 of the schools where teachers completed surveys, no head or deputy head teacher completed a survey. (Total number of schools = 123)
- In 25 schools at least one of the teachers completing a survey (and consequently, one of the teachers who attended training) taught only standards 1-5.

In only one school, Gede Primary in the UC group, were both teachers who completed the survey Muslim.

Conclusions

There was considerable ethnic and economic diversity as well as a mixture of urban and rural schools across these communities. Kikuyu youth predominated in Nairobi and the Mount Kenya region, Mijikenda on the coast and Luhya in western Kenya. Luo represented approximately 20% of the pupils in Nairobi and the Coast, as well. In some, e.g. UC and NFI, pupils came from relatively privileged homes where boys, in particular, had few chores or expectations placed on them and spent much of their time idle. These boys spoke of spending much of their time watching television (both before and after school), eating, fooling around, and spending time on personal grooming. At the other extreme, were communities (e.g. NIS and WKDPA) where boys focused much of their time on earning money – whether legally or illegally. Whatever the wealth of the community, however, girls always had chores and responsibilities and, at times, remained at schools to avoid these. A gendered division of labour was evident in all communities, with the fewer chores, and type of chores assigned to boys justified, in some, by beliefs about differences in the bodies and capacities of boys and girls.

The majority of pupils at all sites identified themselves as Christian, with Muslim youth represented in any sizable number only in the UC schools (29%). In one school in the NIS group (Eastleigh) and in 5 in the UC group (Shika adabu Primary, Mtongwe Primary, Mrima Primary, Kisauni Primary, Centre Girls Primary) more than 50% of the pupils who completed surveys identified their religion as Muslim.

Emerging Issues:

- Boys focus on earning money – through legal and illegal enterprises. Otherwise, especially in urban areas, they are idle.
- Girls obtain money from boys, in exchange for sex. In the urban areas there was considerable talk of girls from poor homes engaging in prostitution. In the UC region this was connected to the availability of tourists rather than poverty.
- Except for the UC region where girls and boys may be involved in selling to tourists, girls had no access to income earning activities. They carried a large share of the responsibility for family and household tasks – which were generally not shared with boys. In some regions, teachers spoke of girls as staying late at school to avoid household responsibilities.
- Circumcision and expectations related to circumcision, especially for boys, were concerns of teachers in several communities.
- In all communities, teachers and community representatives commented on the plight of local orphans. These children were seen as especially vulnerable – often exploited by those who cared for them, as well as having to engage in risky activities in order to provide for their basic needs.

HIV/AIDS TEACHING IN THE SCHOOLS

Surveys and focus groups were conducted in all schools before teachers had a chance to use the skills they had been taught as part of PSABH training. What must be remembered, however, is that all schools had been directed by the Ministry of Education to include one AIDS lesson a week in early 2002 and in 2003 questions about HIV and AIDS began to appear in KCPE. Consequently, it would be expected that there would be some evidence of teaching about HIV and AIDS in all schools. In addition, various organizations have been active in visiting schools and working either with pupils, training them as peer educators or supporters, or with teachers, to improve the instruction about HIV and AIDS in the schools.

Pupils were not always able to directly name the group, those that were identified included:

- Super Kid program
- Friend Centre Church
- Citizen
- Shades Classique
- Genesis group
- Sanna Arts Promotion (in UC and MKFI)
- Makupa Arts
- Kids Alive
- AMKENI

In all regions except MKFI, the school was the most frequently mentioned source of HIV and AIDS information across focus groups. In all three urban schools radio and television were mentioned as sources of information; whereas, in MKFI and WKDPA people in the community were most likely to be mentioned.

Teaching and Learning about HIV and AIDS

Table 3: Mean Programme Implementation Rates and Percentages of Teachers Reporting on Indicators of HIV/AIDS Teaching by Region

Scales (0-10)	Region						
	NFI	NIS	UC	MKFI	WKDPA	Nyanza wave 1	Rift wave 1
N=	43	49	50	48	50	440	121
Mean Programme Implementation Score	3.80	3.79	2.71	4.02	4.97	2.23	2.51
Percentage of Teachers teaching each subject who addressed AIDS last term in:							
English (N who teach this subject=)	76.2% (21)	92.9% (28)	79.2% (24)	96.4% (28)	85.3% (34)	93.5% (108)	82.9% (41)
GHC (N who teach this subject =)	66.7% (18)	65.0% (20)	64.7% (17)	85.0% (20)	76.9% (26)	89.0% (109)	90.9% (22)
HIV& AIDS Class (N who teach this subject =)	92.9% (28)	84.6% (26)	88.9% (9)	97.1% (35)	85.4% (41)	94.8% (172)	79.6% (49)
Home Science (N who teach this subject =)	83.3% (12)	87.5% (8)	80.0% (5)	90.0% (10)	75.0% (20)	81.6% (76)	73.7% (19)
Kiswahili (N who teach this subject =)	53.8% (12)	87.5% (16)	87.5% (16)	92.9% (14)	82.8% (29)	88.3% (60)	85.7% (28)
Music (N who teach this subject =)	70.0% (10)	66.7% (18)	75.0% (8)	94.1% (17)	79.2% (24)	88.9% (72)	86.7% (15)
Physical education (N who teach this subject =)	52.6% (19)	70.0% (20)	58.3% (12)	76.9% (26)	72.7% (33)	91.4% (81)	80.9% (47)
Religious education (N who teach this subject =)	79.2% (24)	87.5% (24)	75.0% (16)	100% (32)	94.6% (37)	92.3% (194)	93.8% (48)
Percentage of teachers who report that last term HIV or AIDS was addressed in:							
Assemblies	76.7%	79.6%	70.0%	91.7%	98.0%	78.3%	78.0%
Staff Meetings	93.0%	77.6%	76.0%	77.1%	88.0%	71.6%	72.9%
Classroom displays	67.4%	59.2%	42.0%	41.7%	56.0%	37.2%	43.1%
Schools work displays	53.5%	51.0%	42.0%	37.5%	48.0%	32.1%	32.8%
Debates	46.5%	38.8%	22.0%	31.3%	60.0%	47.1%	42.7%
Drama/music festivals	83.7%	69.4%	58.0%	47.9%	70.0%	56.8%	46.1%
Class Competitions	39.5%	20.4%	12.0%	12.5%	32.0%	21.1%	20.7%
Information Corner	37.2%	42.9%	44.0%	31.3%	40.0%	24.9%	27.0%
Percentage of Teachers reporting HIV/AIDS education materials							
Reference books	79.1%	71.4%	72.0%	85.4%	92.0%	67.0%	74.4%
Text books	72.1%	59.2%	60.0%	83.3%	80.0%	15.7%	34.7%
Class worksheets	0%	10.2%	4.0%	8.3%	12.0%	3.9%	5.8%
Radio or Video	9.3%	12.2%	28.0%	39.6%	26.0%	5.0%	8.3%
Posters	81.4%	71.4%	72.0%	58.3%	64.0%	42.3%	39.7%
Leaflets Magazines	62.8%	59.2%	80.0%	66.7%	64.0%	48.6%	42.1%
Story books	44.2%	34.7%	26.0%	16.7%	38.0%	12.5%	21.5%
Training Notes	58.1%	49.0%	44.0%	37.5%	54.0%	14.5%	31.4%
Percentage of Teachers using of resources							
Lets Talk about AIDS Handbook	30.2%	34.7%	28.0%	45.8%	70.0%	20.7%	24.8%
Lets Talk about AIDS Book III	37.2%	32.7%	14.0%	56.3%	68.0%	5.5%	18.2%
HIV and AIDS Readers (Green)	4.7%	10.2%	2.0%	6.3%	16.0%	2.0%	3.3%
AIDS Handbook (Blue)	4.7%	14.3%	6.0%	2.1%	20.0%	3.2%	5.8%

The overall implementation score is a composite based on responses to a variety of questions about teachers' activities related to teaching about HIV and AIDS both in the classroom and in co-curricular activities. In the five new regions, the UC scale scores were the lowest, however, all regions were higher than they were in Nyanza and Rift Valley schools prior to programme delivery. This probably reflects school responses to the MoEST directives related to HIV and AIDS teaching.

Among teachers teaching each subject, the majority reported teaching about HIV and AIDS. Nearly all teachers reported doing so in HIV/AIDS classes (85-97%), religious education (75-100%), and English classes (76-96%). Fewest reported teaching about HIV and AIDS in physical education (53%-77%). Teachers from MKFI schools generally had the highest percentages reporting teaching about HIV and AIDS in each subject (77-100%), while those in NFI schools were the lowest (53-93%). Even in NFI schools, however, over half of the teachers who taught each subject reported teaching about HIV and AIDS in that subject.

The methods most commonly used for teaching were assemblies (70-98%) and drama or music (48-84%) and the least commonly used were class competitions (12-40%) and an information corner (31-43%). Here teachers in NFI schools (37-93%) were more likely to report each method while those in MKFI (12-92%) and UC (12-76%) schools the least. Teachers in one Nairobi school reported bringing in psychologists, doctors, elders, pastors, health personnel, and school council members to talk to pupils about body changes, sexual organs and functions. Access to such professionals is only likely to be available in urban schools.

The most commonly used resources for teaching were reference books (72-92%), posters (58-81%), text books (59-83%), and leaflets and magazines (59-80%) with over half of the teachers in each region reporting use of these resources. Almost no teachers, however, reported the use of class worksheets (0-12%) and only small percentages used radio or video (9-40%). One teacher from a NIS school indicated, in the focus group discussion, that they have books for standard 1, 2, 5, and 6 which include information about HIV and AIDS while the science and social studies syllabi contain the topic of HIV/AIDS. For these lessons the boys and girls may be split into different classes.

Although the MoEST and KIE have been distributing book sets to all schools in Kenya, there was only limited evidence that these were available. The most commonly reported books were the *Lets Talk about AIDS* handbook (28-70%) and book III (14-68%). Rarely available were the green HIV and AIDS Readers (2-16%) or the blue AIDS Handbook (2-20%). Teachers in UC schools were the least likely to report the availability of any of these books.

Table 4: Mean Awareness/Participation Scores for Pupils and Percentages of Pupils Reporting Where HIV/AIDS Information Has Been Received

	Region						
	NFI	NIS	UC	MKFI	WKDPA	Nyanza wave 1	Rift wave 1
N =	1935	2460	2261	1423	1795	6801	3502
<i>Mean Participation/Awareness Score</i>	2.70	3.06	3.42	3.49	3.58	3.47	3.25
Percentage of pupils reporting HIV/AIDS addressed in each subject							
Home science	43.5%	50.2%	53.0%	60.6%	61.5%	51.9%	49.1%
Physical education	9.4%	14.2%	14.2%	18.6%	18.8%	32.9%	30.6%
GHC	16.3%	18.2%	24.1%	21.5%	24.0%	22.1%	21.8%
Religious education	47.2%	41.3%	38.5%	47.8%	42.5%	40.1%	49.1%
English	25.0%	27.3%	39.6%	40.8%	45.6%	24.0%	24.3%
Kiswahili	21.0%	24.9%	37.2%	36.4%	36.3%	21.3%	22.7%
Music	7.3%	13.5%	21.0%	11.2%	15.5%	NA	NA
HIV/AIDS classes	47.0%	52.9%	65.4%	72.3%	62.1%	87.1%	84.9%
Science	44.8%	28.1%	20.5%	36.3%	24.4%	NA	NA
Math	.2%	.2%	1.2%	.4%	1.6%	NA	NA
Percentage of pupils reporting that last term HIV or AIDS was addressed in:							
Assembly	49.8%	42.2%	45.2%	51.7%	53.0%	14.5%	NA
Debates	29.0%	32.4%	44.8%	34.6%	39.0%	NA	NA
Drama/music festivals	43.9%	42.7%	64.1%	47.9%	48.0%	NA	NA
Class competitions	26.8%	30.9%	37.0%	36.3%	38.9%	64.6%	NA
A club in school	34.5%	40.9%	38.1%	32.1%	37.6%	21.2%	NA
Information corner	28.9%	37.0%	50.1%	36.2%	32.2%	NA	NA
Percentage of pupils reporting each of the following is present in their school:							
A club where HIV/AIDS is discussed	32.0%	41.5%	30.9%	22.1%	33.1%	38.5%	29.4%
Have a school question box	21.3%	22.2%	17.2%	17.6%	18.8%	39.3%	36.5%

The participation/awareness scores are based on pupil reports of HIV or AIDS being addressed in their classes and in co-curricular activities in their schools and of their participation in these. Although fewer pupils report each activity or area where HIV and AIDS is taught than teachers, the patterns of where teaching is happening closely parallel those of teachers. Of note is that only a small percentage of pupils in each school report there is a question box (17-22%) – considerably lower than was the case in Nyanza (39%) and Rift Valley (36%) before teachers had implemented activities learned in PSABH training.

Although not directly asked in pupil focus groups, where pupils spoke of specific subjects where HIV and AIDS were taught, science was identified in all regions. In NFI schools CRE and a health club were also mentioned and in UC schools pupils said they were also taught about HIV and AIDS in English classes.

Teaching and Learning about Abstinence

During baseline data collection in Nyanza province pupils stressed the need to learn specific strategies to address the pressures that they experienced to play sex. Teacher training since then has included discussions of how to teach such strategies and the need to address the specific pressures that pupils face. Teaching such strategies is tapped through a series of questions on the teacher and pupil surveys with an ‘abstinence teaching/learning’ scale created based on the specific topics that teachers say they have addressed or pupils say have been addressed in their schools.

Table 5: Mean Abstinence Teaching Scores and Percentages of Teachers Reporting Abstinence Topics

Scales (0-10)	Region				
	NFI	NIS	UC	MKFI	WKDPA
N=	43	49	50	48	50
Mean teaching strategies for abstinence Scores	8.79	7.88	6.20	8.33	8.12
Percentage of Teachers who have talked about:					
How to resist playing sex	93.0%	89.8%	74.0%	97.9%	94.0%
How to control natural urges	93.0%	75.5%	50.0%	83.3%	68.0%
How to abstain under pressure from friends	93.0%	89.8%	76.0%	89.6%	82.0%
How to abstain under pressure from boy/girlfriend	79.1%	67.3%	62.0%	72.9%	78.0%
How to avoid sex with older people	81.4%	71.4%	48.0%	72.9%	84.0%

Abstinence teaching is relatively high, suggesting that this is an area that is already being stressed in schools. The only statistically significant trend that stands out here is that teachers in UC schools scored significantly lower on each of these items. This may indicate that in UC schools there is less talk about sex overall. This seemed to be borne out in teachers' comments in focus groups.

Participants from all teacher focus groups suggested that the abstinence message should be the primary one.

- Teachers in NFI suggested that girls who were having difficulty abstaining should be reminded about the risks, including pregnancy and its consequences, and/or they should be given examples of people living with HIV and AIDS. Secondary abstinence should be promoted for those who already have sexual experience.
- According to teachers in NIS, pupils should be told to wait until their time comes before engaging in sex.
- Participants in the teacher focus groups in UC tended to be more concerned about the general impact of any teaching on sexuality:

The current education about human sexuality influences them. Some of them get interested and when they get out of class they experiment as the teacher explained in class out of curiosity (W1UCMT1:1152-54).

We also increase the children's sexual urges that grow with them by drawing and explaining the functions of the private parts (W1UCMT1:1164-5)

- Teachers from Mt. Kenya (Nyeri) believed that abstinence from sex is the only solution, however, their belief that most youth were already sexually active made them question the relevance of the abstinence message. This was compounded by the excessive interest pupils were seen to take in lessons about sexuality.
- Teachers from Mt. Kenya (Embu) believed that there was substantial motivation for adherence to the abstinence message because of the emerging requirement for HIV testing prior to marriage by some churches, compounded with knowledge of those who are HIV positive and the unreliability of condoms (not 100%).
- In WKDPA, teachers are focused on getting students to abstain.

Table 6: Pupil Scores on Learning About Abstinence

Scales (0-10)	Region				
	NFI	NIS	UC	MKFI	WKDPA
N =	1935	2460	2261	1423	1795
Mean learning strategies for abstinence scores	5.23	4.72	4.69	5.01	4.42
Percentage of Pupils who have been taught about:					
How to resist playing sex	64.4%	54.3%	59.0%	55.3%	54.0%
How to control natural urges	48.7%	43.6%	39.1%	50.0%	46.1%
How to abstain under pressure from friends	56.3%	45.5%	43.8%	49.8%	41.3%
How to abstain under pressure from boy/girlfriend	54.9%	46.3%	45.5%	48.5%	41.9%
How to avoid sex with older people	50.2%	41.7%	47.3%	46.9%	37.5%

Pupil scores on learning about abstinence were somewhat lower than those of teachers. Pupils in NFI schools had the highest percentages reporting each topic was being taught and also had the highest mean scores on the full scale. However, among pupils it was those from WKDPA who had the lowest scale scores as well as the lowest percentage reporting each topic was being taught.

When asked how young people can protect themselves from being infected, at least one pupil in most of the focus groups provided some message about abstaining or saying no to sex. Different terminology was used in different regions, including: abstinence, good social morals, avoid sex, say no.

- All of the NFI focus groups included at least one suggestion that prevention required avoiding/not having sex.
- Pupils from NIS were the most likely to refer to abstinence and abstaining from sex as an important means of protection. Five out of the eight focus groups used these specific terms in this context, while the remaining focus groups suggested the need to avoid/say no to sex, or at least to have good social morals. Pupils from these focus groups also included some creative ways to help individuals abstain:

I think the best way for protecting yourself is concentrating in what you love doing like playing football leaving you little or no time to engage in sexual activities (W1NISBoys1:768-70).

If they feel it's a must to play sex they should use a vibrator... (W1NFIGirls5:569).

- Pupils from UC were the least likely to reference abstinence/avoiding sex as a way to protect against HIV. In two focus groups, the discussion on prevention revolved around condoms, while in a third the concern over the connection between HIV and sex was translated into the avoidance of having sex with one who is infected.
- Participants from the MKFI focus groups were the most likely to provide only an abstinence-type message in response to the question about protection. In fact, half of the focus groups discussed the avoidance of sex and/or contexts that could influence sexual behaviour as the sole focus of the prevention discussion, while two others included the need to avoid sharing cutting instruments and a third provided more vague responses about obeying adults and refraining from writing letters as the way to protect against HIV acquisition.
- In WKDPA, at least one pupil in every focus group suggested that avoiding sex (or at least refraining from desiring a girl) was one way to protect against HIV acquisition.

Teacher's Perception of Barriers To Teaching About HIV and AIDS

Table 7: Percentage of teachers who reported each barrier to teaching about HIV/AIDS

Barriers to teaching about HIV & AIDS	Region						
	NFI	NIS	UC	MKFI	WKDPA	Nyanza wave 1	Rift wave1
N=	43	49	50	48	50	440	121
Structural: There are/is not enough:							
• textbooks	81.4%	77.6%	70.0%	70.8%	56.0%	95.8%	88.3%
• training	76.7%	73.5%	60.0%	54.2%	78.0%	89.5%	88.3%
• time	60.5%	57.1%	58.0%	68.8%	44.0%	53.3%	47.1%
Pupils are:							
• too shy	27.9%	32.7%	58.0%	60.4%	60.0%	62.9%	59.2%
• too young	16.3%	14.3%	0%	22.9%	16.0%	NA	NA
Teaching young people about HIV/AIDS:							
• is inappropriate	14.0%	20.4%	26.0%	12.5%	26.0%	NA	NA
• does more harm than good	7.0%	10.2%	10.0%	12.5%	12.0%	16.0%	13.3%
Parents							
• are reluctant	16.3%	44.9%	48.0%	29.2%	44.0%	47.5%	45.8%
Teachers							
• are uncomfortable	25.6%	40.8%	34.0%	35.4%	34.0%	30.2%	42.9%

It is of interest that the majority of teachers in each region reported there were not enough textbooks for teaching about HIV and AIDS given that the texts prepared by KIE were to be distributed to all schools. An emerging issue here is to have zonal inspectors, as part of the School Responsiveness Survey, check whether the prescribed texts have been received and are being used in the schools. This will clarify whether teacher responses reflect an absence of the allotted texts or a reflection on the adequacy of these.

Overall, teachers were most likely to identify structural barriers such as a shortage of texts, training or time rather than barriers related to pupils, parent reluctance or teacher discomfort. The one exception was that 58-60% of teachers in schools outside Nairobi felt pupils were too shy to deal with sexual matters in the classroom. This was distinctly different from the responses in Nairobi, where 28-33% of teachers felt this way.

In focus group discussions, teachers in the NFI schools commented that the presence of multiple cultural beliefs and practices complicated discussions of sexuality. Participants suggested the need to provide alternative forms of authority to challenge the diverse and prevailing definitions of 'maturity' and the implication that sexual activity accompanied maturity. The syllabus and/or science were suggested as such alternatives.

Teacher Attitudes Toward Teaching About HIV/AIDS and Related Issues

Table 8: Percentage of teachers who reported each attitude

Attitudes concerning HIV & AIDS	Region						
	NFI	NIS	UC	MKFI	WKDPA	Nyanza wave 1	Rift wave1
N=	43	49	50	48	50	440	121
HIV & AIDS is a big problem	93.0%	85.7%	78.0%	85.4%	94.0%	86.6%	86.7%
We need to be able to talk openly about sex	100.0%	100.0%	98.0%	95.8%	100.0%	95.8%	95.0%
The more information provided to pupils the better	93.0%	98.0%	94.0%	91.7%	100.0%	95.3%	92.4%
Those infected <u>do not</u> have only themselves to blame	72.1%	67.3%	60.0%	54.2%	70.0%	55.9%	58.0%
HIV is <u>not</u> God's punishment	51.2%	59.2%	48.0%	45.8%	40.0%	48.8%	41.7%
Promoting condom use <u>does not</u> encourage pupils to have sex	18.6%	24.5%	12.0%	20.8%	14.0%	18.5%	15.0%

On three of the attitude questions nearly 80% or more of teachers at all 5 of the new sites scored positively:

- 96-100% of teachers at each site believe there is a need to talk more openly about sex;
- 92-100% believe the more information that is provided the better, and
- 78-94% believe that HIV/AIDS is as big a problem as it is made out to be.

This paralleled results at wave 1 in Nyanza and Rift Valley schools.

There was greater variation and less consistently positive attitudes displayed on the remaining three questions. With respect to 'blame' for acquiring HIV and 'punishment from God,':

- Teachers in WKDPA and Nairobi schools had the most positive attitudes with 67-72% feeling those who were infected did not, "have only themselves to blame."
- 59% of those in informal settlement schools rejected the idea that, "AIDS is a punishment from God," while the percentage in the remainder of sites ranged from 40-51%.

Attitudes Toward Abstinence and Condoms

In focus group discussions, teachers stressed abstinence as the desired approach to HIV prevention and as the approach they were most comfortable teaching. In all regions, teachers felt that teaching about condoms would encourage condom use. This was also reflected in teacher responses to survey questions. Fewer than ¼ of teachers in any school, and as low as 12% in Coast schools held a positive attitude toward teaching about condoms reflected in their rejection of the belief that teaching about condoms encouraged sexual activity. Focus group comments reflect this attitude.

From NIS schools:

If you tell them to use them they will and you will find them in the compound (W1NIST1:874-875)

From teachers in Nyeri (MKFI):

Because the minute you teach that boy how to use it, it is a license to play sex (W1MTKT1:886-887).

When you teach them in class, some are innocent and you will pollute all of them (W1MTKT1:898-899).

From teachers in boarding schools in the MKFI region:

Personally I think if we encourage the use of condoms at that age, I think we will be encouraging more immorality. I think condoms should only be used at an age that is committed to marriage (W1MTKT2:1186-1188).

Teachers in NIS schools commented that the curriculum already includes condoms:

In the standard 5 Science book they are told to abstain and if you cannot you use condoms (W1NIST1:861-862).

There was most talk about condoms among teachers from WKDPA. Most expressed concern:

When they are demonstrating it [condoms] means he is thinking about sex and when you think about something you become psychologically affected (W1WTKT1:556-557).

We are not supposed to tell them about condom because they are under age they are supposed to abstain. Why are we telling 19-year-old children about the condom? (W1WTKT1:781-783).

There was also concern that the syllabus must be covered and that teachers had a duty:

Because we are imparting knowledge and this is what the syllabus says. You just teach them, because if we are not telling them we as teachers are failing them (W1WTKT1:927-929).

But information about condoms should include the disadvantages:

We cannot say that a condom does not have disadvantage we tell them (W1WTKT1:930).

In WKDPA, condoms were reported to be found by the roadside and in the school compound. Condom marketing has placed condoms on television, radio and billboards in all the regions included here. One Nyeri teacher used the example of her own daughter to illustrate that pupils have learned about condoms at a young age:

I asked my daughter who is in class two if she knows anything about condoms and she said she knows. It is a protection used by people who do not want to get pregnant or to be infected by HIV/AIDS (W1MTKT1:881-3).

In Nyeri (MKFI region), teachers suggested that they would show pupils who are playing sex a real condom and how to use it

I will show him the real thing and how to use it because I want to protect him (872-3).

I will tell them a condom is used while playing sex but it can tear and it is supposed to be used by grown ups. If you play sex without a condom you will get AIDS (W1MTKT1:917-919).

In one focus group teachers spoke about the importance of giving pupils information so that they could make informed choices:

When we teach the children we just have to teach them give them the information and they make their informed choice. Children are people so we cannot really force them to decide we tell them the right things and it's upon them to make an informed choice (W1WTKT1:937-940).

Overall, however, promoting condoms was most likely to be seen as promoting sex. Teachers feared that youth did not know how to use condoms properly, would not use condoms consistently, and would stop using them with regular partners. Teachers were uniform in their belief that condoms should be for adults. Pupils should be told that their time would come and parents should reinforce this. In fact, one teacher in an UC school encourages parents to inform children:

Parents should not feel shy but explain more about what the child asks to satisfy his/her curiosity, otherwise the child will be immoral (W1UCMT1:1170-1171).

These results are consistent with those found in Nyanza and Rift Valley prior to programme delivery.

Conclusions Regarding Schools and Teachers

Teachers appeared to be ready to embark on improving HIV and AIDS education in their schools. The barriers they perceived were primarily those that are addressed in PSABH training and their attitudes were positive toward gains that may be made through teaching youth about HIV and AIDS and open to such teaching. Teachers were already incorporating teaching about HIV and AIDS into their classes. In NFI schools teachers commented about the challenge in teaching topics related to sexuality in schools where there is considerable ethnic diversity and consequently considerable diversity of views about when and how such teaching, as well as when sexual activity, should appropriately occur.

Teaching that abstinence from sex will protect against HIV is preferred in all regions. In focus groups, however, teachers were able to reflect on and relate how they speak with sexually active youth about condoms. Talking about sexual issues appears to be present in all schools with teachers commenting that this is supported by course materials provided by the MoEST. Teachers in UC schools, however, articulated concerns that any teaching about sexuality stimulated curiosity and encouraged youth to experiment.

Overall, teaching about HIV and AIDS is occurring, primarily in classroom subjects and secondarily in assemblies and through the use of music and drama. Few schools appear to have established co-curricular activities such as a question box or school health club. In fact, this is less common in these regions than it was prior to PSABH training in the Nyanza and Rift Valley schools.

Emerging Issues

Teachers cited a shortage of textbooks as a barrier to teaching. The presence of texts in the schools should be checked by zonal inspectors since all schools are supposed to have received books through the MoEST and KIE.

PEER SUPPORTERS IN THE SCHOOLS

One component of the PSABH programme has included training 4 peer supporters and a teacher supervisor. Problems were discovered in sustaining the peer supporter programme beyond the tenure of the PSABH trained peer supporters in the schools. Consequently, it was decided that PSABH would include training of peer supporters only in primary schools that were close to secondary schools. The reason was that youth in these schools were considered to need more support from their peers to resist potential sexual liaisons with the older, secondary school students in their communities.

From the data collected for this report, it appears that there are other programmes in Kenya that are training pupils as peer supporters or peer educators. The results reported in this chapter are based on pupil responses to questions about whether they have been trained as peer supporters with respect to HIV and AIDS education and reports of both these trained peer supporters and other pupils about peer supporter activities in the schools.

Table 9: Percentage of Peer Supporters and Non Peer Supporters Reporting Activities

Activity	NFI		NIS		UC		MKFI		WKDPA	
	PS	Not PS	PS	Not PS	PS	Not PS	PS	Not PS	PS	Not PS
N=	155	1780	613	1847	893	1368	181	1242	441	1354
Involved in a PS-pupil discussion about H/A	43.2%	21.8%	47.1%	28.2%	60.6%	30.8%	48.6%	19.6%	55.8%	21.2%
Involved in a PS-pupil discussion about condoms	32.3%	11.6%	35.4%	19.4%	45.1%	27.6%	36.5%	10.4%	39.5%	16.8%
Participated in a PS led activity about H/A	23.2%	17.4%	33.3%	24.2%	40.2%	25.7%	21.0%	17.0%	33.3%	19.3%
Involved in a PS-pupil discussion about ways to abstain from sex	42.6%	21.6%	46.2%	31.4%	59.1%	37.6%	29.8%	23.3%	46.5%	25.4%
Talked about H/A at the school health club	35.5%	19.1%	42.3%	31.9%	47.8%	31.5%	15.5%	22.6%	40.4%	23.6%

PS: pupil who self identifies as a trained peer supporter

Not PS: Pupil who does not self identify as a trained peer supporter

There was agreement between the peer supporters and the non-peer supporters in the schools that the most common activities of peer supporters in the school were to engage in discussions with pupils about:

- HIV/AIDS (43-61% of peer supporters had engaged in this activity, 20-31% of non-peer supporters), or
- ways to abstain from sex (30-59% of peer supporters had engaged in this activity, 22-38% of non-peer supporters).

The least common activities were discussion of condoms with other pupils (32-45% of peer supporters reported this activity, 10-28% of pupils) and participation in a PS led activity on H/A (21-40% of peer supporters reported this activity, 17-26% of pupils).

Peer supporters were the most active in UC schools, where they and pupils consistently had the highest percentages reporting each activity. These ranged from lows of 40% of peer supporters and 26% of pupils reporting participation in a PS led activity on H/A to highs of 59% and 62% of peer supporters reporting discussions of abstinence or HIV and AIDS and 38% and 31% of pupils making the same reports.

Peer supporters were least active in MKFI schools where reports of their activities ranged from lows of 21% of peer supporters and 17% pupils reporting participation in a PS led activity on H/A to highs of 49% of peer supporters and 20% of pupils reporting discussions of HIV and AIDS.

The consistency in the reports of both students claiming to have been trained as peer supporters and the rest of the pupils in the schools support the validity of these results. It appears that some pupils in all schools have been trained to engage pupils around topics related to HIV and AIDS.

Because this round of data collection has taken place before the implementation of PSABH activities in the schools, there was no further exploration of peer supporter activities in focus group discussions.

Conclusions

Peer supporters are present in many schools and are engaging in discussions and activities related to promoting sexual safety with their fellow pupils. The focus of these activities is on abstinence rather than condom use.

Emerging Issues

The large number of pupils who claim to be trained as peer supporters raises the question of whether training peer supporters as part of PSABH is worthwhile. Perhaps PSABH could provide refreshers for existing peer supporters or could connect the peer supporters already in the schools to the PSABH activities without training a group of new peer supporters.

KNOWLEDGE

Knowledge is considered a necessary (though not sufficient) pre-requisite for taking action to reduce risk or vulnerability to HIV infection. It proved particularly difficult to tap knowledge in the full evaluation study where mean scores on the knowledge scale did not change for either pupils or teachers over the nearly 2 years of data collection.

This was not surprising for teachers since their scores were relatively high (70% or more questions answered correctly) before the initiation of PSABH, with misinformation remaining primarily in areas of moral contention (e.g. can condoms prevent HIV) or technical sophistication (e.g. the relationship between STIs and HIV). These issues continued to create problems throughout the tenure of PSABH in Nyanza and Rift Valley schools, although teacher views on condoms were shown to shift towards separating factual information from moral beliefs as the programme was in the schools longer. By the time the programme was in the schools for 30 months, teachers were increasingly able to answer questions related to factual information about condoms correctly, separating fact from moral belief.

For pupils, it was focus groups in Nyanza and Rift Valley which gave insights into how they were thinking and reasoning about HIV and AIDS. What was found in focus group discussions was that pupils could accurately convey information about HIV transmission and prevention, could engage in discussions of conditions under which certain strategies for prevention might be questionable or infeasible and what the alternatives might be, and could identify and critically assess misinformation which they had heard in their communities. Our conclusion was that the simple yes/no answers to knowledge questions on the survey did not provide a true reflection of pupil knowledge since it did not capture the conditionality required in making assessments of risk, transmission and prevention in pupils' day-to-day lives.

What was found in the full evaluation was that by the time PSABH was in schools for 30 months, a higher percentage of pupils were obtaining passing grades (i.e. >50% of questions answered correctly) than had done so either before the programme began or even after it was in schools for 18 months. In addition, the longer a pupil was engaged with the programme or the greater the pupil's awareness of and participation in the programme, the better the scores on the knowledge scale.

Knowledge and belief are tightly entangled with beliefs about what is right or wrong typically supported with knowledge claims and particular interpretations of knowledge. Thus, information that condoms are nearly 100% effective against HIV transmission become statements that they are not 100% effective in the context of beliefs that they are not morally acceptable. This is accompanied by beliefs that condoms are, therefore, not effective ways to reduce the spread or risk of HIV infection. Similarly, while avoiding sex may be recognized as a way to avoid infection, when sex is not always under the volitional control of pupils, the reasoning behind a 'no' answer as to whether avoiding sex reduces risk for HIV results from the recognition that sex cannot always (or perhaps can never) be avoided. It is not until pupils believe they have ways to avoid sex that they begin to say that avoiding sex is a way to reduce their own risk for HIV infection. Creating an environment in which pupils truly have control over what happens to them sexually involves not only learning that control is possible but also learning how to deal with situations and interactions where sex may occur. More importantly, it also involves changing the environment where those more powerful than pupils control their sexual lives to make it possible for youth to refuse sexual activity.

The complex nature of knowledge must be kept in mind in interpreting the survey results that attempt to tap knowledge about HIV transmission and prevention.

Teachers

Table 10: Teacher Mean Knowledge Scores and Percentages of Teachers Responding Correctly to Each Knowledge Item by Region

Scales (0-100)	Region						
	NFI	NIS	UC	MKFI	WKDPA	Nyanza wave 1	Rift wave 1
N=	43	49	50	48	50	428	117
Mean % correct answers	88.8%	86.8%	78.0%	86.1%	84.2%	78.7%	75.9%
Percentage of Teachers that believe these actions reduce the chances of infection							
Avoid having sex	86.0%	91.8%	76.0%	85.4%	80.0%	69.9%	70.1%
Not sharing razors	88.4%	91.8%	86.0%	89.6%	94.0%	96.0%	98.3%
Using condom	88.4%	81.6%	70.0%	81.3%	84.0%	80.8%	66.7%
Being faithful to partner	97.7%	93.9%	90.0%	91.7%	98.0%	92.3%	94.0%
Using clean needles	93.0%	98.0%	84.0%	93.8%	86.0%	91.8%	90.6%
Percentage of Teachers that believe that the following don't reduce the chances of infection							
Wearing infected persons clothes	69.8%	69.4%	62.0%	60.4%	54.0%	61.2%	44.4%
Sharing food with infected persons	88.4%	89.8%	76.0%	89.6%	86.0%	70.1%	69.2%
Mosquito bites (insects)	88.4%	79.6%	76.0%	91.7%	80.0%	61.4%	65.8%
Shaking hands	100.0%	85.7%	82.0%	91.7%	96.0%	93.5%	83.1%

Teacher knowledge is already high. On average, most teachers in the new regions responded to between 78% and 89% of the questions correctly. These knowledge scores are as high, or higher, than those obtained by teachers in Nyanza and Rift Valley schools prior to programme delivery.

Considering specific questions, almost all teachers identified remaining faithful to one partner, not sharing razors and using only clean needles as ways to prevent HIV transmission. While most also responded to other questions about 'safer sex' correctly, correct answers were not as consistent for these questions (e.g. 76-92% knew to avoid sex, 70-88% to use a condom). Mean scores were high on all but the questions about sharing clothes with an infected person (54-70% rejected the idea that this was problematic).

Pupils

Table 11: Pupil Mean Knowledge Scores and Mean Percent Correct Responses to Knowledge Items by Sex and Region

Scales (0-10)	Region						
	NFI	NIS	UC	MKFI	WKDPA	Nyanza wave 1	Rift wave 1
N=	1935	2460	2261	1423	1795	4682	2720
Mean Percent Answers Correct	70.5%	62.0%	59.5%	57.7%	59.1%	58.6%	60.6%
Mean Percent With Passing Grade*	84.3%	72.2%	69.6%	63.7%	65.2%	65.7%	69.0%
Percentage of pupils that believe these actions reduce the chances of infection							
Avoid having sex	83.2%	69.7%	71.5%	66.3%	52.6%	71.0%	72.6%
Not sharing razors	75.3%	64.4%	59.3%	66.1%	65.3%	69.9%	66.2%
Using condom	72.1%	66.2%	62.0%	54.0%	53.4%	62.5%	56.9%
Being faithful to partner	59.5%	53.0%	49.4%	46.3%	52.3%	48.8%	50.1%
Using clean needles	80.5%	75.2%	73.9%	69.9%	63.2%	67.9%	66.3%
Percentage of pupils that believe that the following don't reduce the chances of infection							
Wearing infected persons clothes	61.2%	55.7%	54.4%	53.5%	58.7%	54.7%	58.3%
Sharing food with infected persons	67.5%	58.1%	55.6%	52.9%	61.7%	50.4%	57.7%
Mosquito bites (insects)	56.7%	46.3%	42.8%	49.6%	54.0%	43.5%	51.3%
Shaking hands	78.3%	68.9%	66.9%	61.4%	71.0%	58.5%	65.6%

* Correct answers to at least 50% of the questions.

Overall, knowledge scores for youth were low, with the average number of correct answers ranging from 58% in MKFI to 71% in NFI schools and the mean percent of students passing the knowledge test ranging from 64% in MKFI to 84% in NFI. While not significantly different from scores in the remainder of the sites, those for pupils in the urban schools are higher than in the rural schools. This suggests that youth living in urban environments may be exposed to more information about HIV and AIDS, contributing to better knowledge.

Similar to Nyanza and Rift at wave 4, pupils in all focus groups were familiar with HIV and AIDS and were able to identify several modes of transmission, the most frequent of which was through sex but discussions of transmission through blood, cutting instruments and saliva were also included. They were also familiar with VCT and were able to identify how condoms could be obtained in the community. When probed, pupils were able to identify at least one contextual factor which influenced whether young people played sex and were thus at risk for HIV acquisition. Pupil knowledge about condoms seemed to be better in these sites than it was in either Nyanza or Rift at baseline. Although at least one pupil in every region made comments about the limits of condoms – e.g., not 100%, could burst, have holes, only protect from pregnancy, pupils tended to be far more positive about condoms and the need to use them to protect against HIV transmission than the pupils at baseline in either Nyanza or Rift. In each region there were pupils who knew that condoms would prevent the virus and sperms from passing from one partner to the other.

For example if you have an umbrella against rain you can't get wet (W1WTKBoys3:487).

Very few pupils indicated that information about condoms came from teachers. The primary sources of information about condoms varied by region.

- Television and the information found in condom packets were identified as sources in 6/8 focus groups from NFI.

- Participants in half of the NIS pupil focus groups suggested that information on condoms was obtained through visiting groups. Obtaining information from television and parents were identified in 3 of the 8 focus groups.
- 4/8 focus groups in UC region indicated that condom information could be obtained from visiting organizations. In fact, girls in one school indicated that a vehicle advertising and distribution condoms could frequently be seen in their area. Information could also be obtained from television and radio.
- In MKFI, 3/8 focus groups identified radio, media advertisements and visiting organizations as sources of information about condoms
- 3/8 focus groups in WKDPA suggested information about condoms could be obtained from parents, friends and the radio.

Misinformation or at least problematic information was provided in some pupil focus groups. The belief that people with HIV and AIDS were consciously spreading the virus to others was the most common of these statements. Others included the potential for HIV transmission through shaking hands, sharing toothbrushes, and kissing, each of which was frequently qualified by the presence of wounds or bleeding. As well, whether or not HIV could be spread through mosquitoes was discussed in one focus group from NFI and two from WKDPA.

Conclusions

Teacher knowledge is high. While pupil knowledge is not as high, focus group discussions among youth convey the impression that pupils are able to think about HIV transmission and prevention logically and critically. Where there is apparent misinformation (e.g. spread through shaking hands) this is qualified with statements about wounds and bleeding.

Pupils in these regions demonstrated better knowledge and a greater diversity of sources of information about condoms. This was not from teachers, but from visitors to schools, television, radio, parents and friends.

There continues to be misinformation and myth about HIV transmission and prevention.

PUPIL PURSUIT OF INFORMATION AND COMMUNICATION ABOUT HIV AND AIDS

Pursuing information and communicating with others about HIV and AIDS are considered important factors that contribute to pupils' awareness, knowledge, and skills related to making decisions and protecting themselves from HIV infection. In the full evaluation it was found that PSABH contributed to pupils' abilities in these areas and particularly that those pupils who participated more in the programme or had been involved in it longer were more likely to report pursuing information on their own and communicating with others about HIV and AIDS.

Questions about pursuing information about HIV and AIDS were asked separately of pupils who claimed to have received peer supporter training and those who did not make this claim. They are reported accordingly in Table 12 below.

Table 12: Percentage of Pupils Pursuing HIV & AIDS Information by Sex and New Site

	Region						
	NFI	NIS	UC	MKFI	WKDPA	Nyanza wave 1	Rift wave 1
BOYS							
Pursuing Information about HIV & AIDS							
<i>Non-Peer Supporters N=</i>	931	826	599	647	550	2979	1512
Used Question Box	12.7%	17.3%	24.4%	18.7%	11.5%	51.6%	41.6%
Asked Teacher	58.4%	51.2%	49.2%	49.6%	46.9%	61.2%	56.4%
Talked to Parent	35.8%	28.0%	29.2%	46.7%	28.0%	49.5%	48.9%
Talked at Health Club	20.7%	31.8%	33.4%	28.6%	22.9%	48.2%	NA
<i>Peer Supporters N=</i>	73	370	483	49	295	NA	NA
Used Question Box	34.2%	32.7%	35.8%	24.5%	23.4%		
Asked Teacher	38.4%	46.5%	58.0%	34.7%	46.4%		
Talked to Parent	31.5%	37.3%	49.1%	30.6%	42.4%		
Talked at Health Club	30.1%	37.3%	46.0%	24.5%	41.0%		
GIRLS							
Pursuing Information about HIV & AIDS							
<i>Non-Peer Supporters N=</i>	849	1021	769	595	804	3146	1665
Used Question Box	14.1%	17.9%	17.2%	10.6%	13.7%	50.0%	44.1%
Asked Teacher	62.0%	52.2%	50.8%	42.0%	42.3%	58.2%	58.2%
Talked to Parent	59.1%	49.3%	43.2%	32.4%	42.5%	60.5%	62.5%
Talked at Health Club	17.3%	32.0%	30.0%	16.1%	24.1%	46.6%	NA
<i>Peer Supporters N=</i>	82	243	410	132	146	NA	NA
Used Question Box	36.6%	40.7%	30.5%	40.9%	28.8%		
Asked Teacher	59.8%	65.8%	57.6%	49.2%	46.6%		
Talked to Parent	61.0%	56.0%	60.5%	15.9%	41.1%		
Talked at Health Club	40.2%	49.8%	50.0%	12.1%	39.0%		

Table 12 reports on the percentage of pupils who pursued information about HIV and AIDS through talking to teachers or parents or through using a school question box or a school health club. Several patterns are evident:

- Boys and girls, whether or not they were trained as peer supporters, were most likely to talk to their teachers and least likely to use a question box. The only exceptions were the high percentage of peer supporter boys in NFI and peer supporter girls in MKFI schools who reported using a question box.

- Few pupils in all regions reported either using a question box or talking at a school health club. These percentages were consistently lower than those in Nyanza and Rift Valley schools at baseline.
- For girls, peer supporters were more likely to engage in each type of pursuit of information more than pupils who were not peer supporters. For boys this was the case for use of the question box and school health club, but there was no consistent pattern across the regions for talking to parents or teachers.

Question boxes were not discussed in pupil focus groups; however, both boys and girls identified multiple sources which provided them with information about HIV and AIDS including:

- Media – radio, television, newspapers, films, videos, advertisements
- School, teachers and textbooks
- Doctors, hospitals, VCT and hospital booklets
- Pastors, church leaders, preachers, Sunday school teachers and church seminars
- Friends and siblings
- Parents, grandparents, aunts and uncles
- Neighbours, and people in the community
- Organizations

When the conversation focused on sex or condoms, however, pupils became more selective about who would speak to them and with whom they would speak. They were more likely to indicate that information about sex came from the media (specifically naming programmes such as The Bold and The Beautiful and La Revancha) and/or from older or same aged, experienced peers than from any other sources. In some cases, asking adults seemed to be dependent on the type of relationship between the individuals and the specific content of the discussion.

* Q: *Can you ask your mother [about girlfriends/sex]?*

No, I will fear

* Q: *What if you ask her*

She can answer but you will feel that you have offended her (W1WTKBoys1:874-878).

When I want to know more about sex I usually ask my uncle who lives in South C (W1NISBoys1:830-831).

In some focus groups, pupils indicated that there were many adults who simply would not discuss condoms with them and that if they raised the issue of condoms, they might be questioned regarding why they needed the information.

Some parents are shy in talking to their children, so if they find it difficult they can tell their friends to talk to the child (W1NISGirls4:629-630)

But some shopkeepers don't tell young people how to use condoms. If you are over fifteen they will instruct you (W1WTKGirls3:353-354).

Sometimes if you ask [about condoms] you are beaten and asked where you learned all that (W1NFIGirls5:772).

In one UC focus group, girls reported that there were vehicles which travelled around the area and provided information and condoms. This was not confirmed by the boys.

Anywhere like when these people who move with vehicles come in a certain area they go there and learn from them (W1UCMGirls1:682-683).

Table 13: Mean Scores for Communication with Family and Other Community Members by Sex and Region

	Region				
	NFI	NIS	UC	MKFI	WKDPA
Boys N=	1004	1196	1082	696	845
Talked to female relatives about H/A	1.35	1.15	1.18	3.43	1.18
Talked to male relatives About H/A	1.63	1.55	2.21	1.70	2.48
Talked to others in the community	2.69	2.61	2.73	2.96	2.94
Girls N=	931	1264	1179	727	950
Talked to female relatives about H/A	3.61	2.99	2.44	1.62	2.68
Talked to male relatives About H/A	.84	.72	.66	1.21	.86
Talked to others in the community	2.65	2.52	1.87	2.32	2.11

Pupils were more likely to report talking to relatives of their own gender about HIV or AIDS than relatives of the opposite gender. Boys, however, were more likely to talk to others in the community than to relatives. These patterns held across all regions with the exception of MKFI boys who were most likely to talk to female relatives than any other group of people in their community and MKFI girls who were most likely to talk to non-relatives in their community than to either group of relatives.

Conclusions

Pupils were more likely to report talking to teachers than parents.

Fewer pupils in the new sites reported using a question box or a school health club than did so in Nyanza and Rift Valley schools prior to PSABH. Combined with results showing that few schools had a question box, the low use of question boxes when they were present suggests this is an area that is not very evident in schools.

Girls spoke more to female relatives about HIV and AIDS than any other group in their community and boys to non-relatives in their community. Youth in MKFI schools were the exception with girls more likely to speak to non-relatives and boys to female relatives.

In focus groups, pupils reported that talking about sex, and especially about condoms is difficult. They generally cannot speak with family members about sex and responses of parents and other community members may be accusatory if they try to talk about condoms.

PUPIL SEXUAL BEHAVIOURS AND RISK PERCEPTION

The primary outcome goal of PSABH is to effect a change in the sexual behaviours of youth so that fewer of them engage in behaviours that are likely to place them at risk for HIV infection. In Nyanza schools prior to PSABH, high percentages of youth reported already having engaged in sexual intercourse and few reported condom use. Youth described a variety of factors that pushed them to be sexually active as well as an inflexible script or sequence of events that occurred between boys and girls which, once begun, inevitably led to sexual intercourse.

Survey questions were designed to tap pupil attitudes toward sexual activity, and in particular their sense of control or agency in making decisions about such sexual activity.

Pupil Beliefs and Attitudes Related to Their Sexual Agency

Table 14: Percentage of Pupils Reporting Attitudes Toward Sexual Behaviour and Condom Use

	Region						
	NFI	NIS	UC	MKFI	WKDPA	Nyanza wave 1	Rift wave 1
N =	1935	2460	2261	1423	1795	6801	3495
I can say 'no' to sex	75.5%	49.3%	37.4%	49.8%	27.4%	49.0%	53.1%
When a girl says 'no' she means 'no'	62.7%	43.1%	28.4%	40.4%	24.5%	50.8%	53.2%
I can talk to boyfriend/girlfriend about using a condom	55.8%	49.0%	41.6%	31.3%	38.6%	NA	NA
I can make sure we use a condom	70.4%	64.0%	54.0%	48.1%	53.5%	NA	NA
A girl can refuse even if the boy is older	62.5%	46.9%	37.4%	41.5%	30.1%	NA	NA
A gift from a boy doesn't obligate a girl to play sex	76.0%	61.7%	59.3%	52.2%	48.1%	NA	NA
A girl can refuse even if he is her boyfriend	65.5%	50.5%	43.5%	48.8%	38.7%	NA	NA

For the few questions that were included in the baseline Nyanza or Rift Valley surveys, pupils attending NFI (but not informal settlement) schools had higher percentages expressing a sense of control than did pupils in the original Nyanza and Rift Valley sites. Otherwise, for the questions on being able to say 'no' and a girl meaning 'no' when she says 'no,' more pupils in the Nyanza and Rift Valley baseline surveys answered these in a way that suggested they had a sense of control over their own sexual decisions and respected the decisions of others than did pupils in the new sites.

Overall, pupils in the two sets of Nairobi schools were the most likely to respond to questions reflecting a sense of agency or control over their sexual decision-making. Those from WKDPA were least likely to respond in this way with pupils from UC and MKFI schools usually between these two groups. More specifically:

- NFI schools had the highest percentage responding in a way that supported a sense of personal control or agency, followed closely by pupils in NIS schools.
- For three of the questions, pupils in UC had the third highest proportion responding in a way that supported their sense of control or agency. For the four questions that inquired about the ability to refuse to play sex, however, pupils in UC schools fell behind those in MKFI schools.

- Pupils in MKFI schools were least likely to respond to questions related to condom use in a way that suggested they had a sense of control or agency with respect to condom use.
- For questions related to a girl's ability to refuse to play sex regardless of whether it is her boyfriend, an older man, or a gift which is obligating her, pupils in WKDPA schools were least likely to respond in a way that suggested they felt girls had control of these situations.

It is particularly important to note that where it is possible to draw a comparison with Nyanza and Rift Valley pupils, with the exception of NFI schools, pupils' sense of agency with respect to being able to abstain is lower in the new sites.

In pupil focus groups for the five new sites, at least one participant in each community indicated that it was possible for young people to avoid playing sex. The motivations for refusing varied, while the approach to doing so was often reduced to saying 'no', controlling oneself or otherwise avoiding situations or individuals which may entice one to play sex.

I don't mix with boys because my mother would punish me if she sees me walking with boys (W1NISGirls1:144-5).

Like when a boy and a girl are together they have to control their feelings because there are some who have bad feelings. So they have to control their feelings to protect something bad to happen (W1UCMGirls4:147-9).

Some young people appealed to love as both a motivation to abstain and, the absence of love as a reason why some chose not to play sex.

You will hurt a girl you love by forcing her to play sex (W1UCMGirls4:510)

She won't accept to be touched there by you if she doesn't love (W1MTKBoys2:128)

One boy in WKDPA suggested that having been circumcised meant that he was not longer eligible to do childish things such as play sex.

When faced with physical force, girls had limited options. In most communities, the best they could do was to scream and/or report force to parents or police. However, girls from one school in UC identified several self-defence techniques that they could use.

You know my mother was telling me that if a man wants to rape you, you just hit his penis...

Yes like if you are wearing high-heeled shoes you just hit him there.

Or you pull the penis and twist it then he will leave you...

Or you bite him...His nose or you hit his stomach.

Or if he has taken you to his house you can take an Ugali stick and hit him (W1UCMGirls4:431-444).

These examples of sexual agency, however, were the minority. More frequently, young people spoke of the scripts and motivations which were destined to lead to sex. This was particularly the case with physical force and/or the use of drugs/alcohol/love potions. In situations of extreme poverty, it was suggested that some girls are regularly forced to exchange sex for food, rent and to generally support themselves.

A similar problem arose with respect to the discussion and use of condoms. Despite the higher level of knowledge about condoms and a better acceptance of their ability to protect against HIV than was

found in Nyanza and Rift, pupils in all of the communities provided reasons why young people frequently failed to talk about and use condoms.

The reasons include:

- Young people are too shy, scared or ashamed
- Discussing condoms suggests an interest in playing sex:
If the boy talk about it with the girl the girl might think that the boy wants to play sex with her (W1NFIGirls3:210-4).
- Sex is believed to be less satisfying with condoms
- Pupils are too young/too small to use condoms
- Don't know enough about condoms/don't know how to use them
- Boys are afraid the girls won't want to use it
- Discomfort with condoms
They fear because when they touch the condom the lubricant gets on to their hands (W1MTKBoys3:485-486)
- The belief that condoms are not effective
They destroy boys' bodies. Because the sperms will remain in the condom (W1MTKBoys4:743-746).

Yes, if you pour water inside you will see the water passes through in drops (W1WTKBoys1:738-9).

Particularly in NIS and UC schools, the connection between HIV and condoms became a source of debate with respect to the use of condoms

Others are ashamed when you tell them to use the condom. They think you are saying you are HIV positive and they can even beat you (W1NFIGirls5:682-3)

They do not want to show themselves as if they are already exposed to it [HIV] (W1NISGirls3:202).

Throughout the communities, there was also general concern about whether or not young people could access condoms:

You might be scared of going to buy (W1NFIBoys1:755)

Because he does not have money to buy a condom (W1MTKBoys1:566)

*If you go to buy in the shops you can't be given.
They only give adults* (W1WTKBoys3:325-6).

Pupils in Nairobi schools suggested that a relationship could be exploited to either convince a partner to use a condom or to forego their use:

If he really likes you he will use. He will hate to loose his girlfriend if he does not use (W1NFIGirls1:222-225).

If you understand and love each other he may agree to use condoms but if he is out to use you he may pretend that he does not know what a condom is (W1NISGirls1:580-2).

If you both love each other then you will just agree to have sex without using a condom because they feel they cannot have AIDS at a tender age and so find there is no need of using condoms (W1NISGirls1:613-5).

Other pupils suggested that fear of AIDS prompted some to use condoms.

When the girl insists that she does not want to be infected with AIDS (W1WTKGirls1:445).

One group in MKFI suggested that girls should consider purchasing condoms or using female condoms as a way to protect themselves.

Girls often refuse to have sex without a condom

Use the female condoms.

She should buy a condom and maybe the boy will agree (W1MTKBoys4:756-759)

Ultimately, however, it was felt that condoms would not be used:

If a girl asks a boy to use a condom some will, some won't

And if he doesn't wear one - the girl will play sex anyway

It is very rare to hear a girl insisting the use of a condom,... (W1MTKBoys2:384-387).

Reported Sexual Behaviour

Table 15: Percentages of Pupils Engaging in Sexual Behaviour by Sex and Region

	Region						
	NFI	NIS	UC	MKFI	WKDPA	Nyanza wave 1	Rift wave 1
BOYS N=	1004	1196	1082	696	845	3360	1658
Refused to play sex in the past 3 months	22.3%	27.5%	25.9%	16.1%	19.4%	* 33.8%	* 39.2%
I was not asked to play sex	57.0%	39.5%	41.3%	53.3%	48.3%	17.0%	12.3%
Recently chosen not to go somewhere to avoid sex	45.2%	28.3%	29.7%	26.3%	27.7%	31.1%	30.0%
Situation hasn't occurred	---	---	---	---	---	10.5%	8.3%
I am not sure	12.4%	17.4%	21.2%	23.9%	19.8%	---	---
Never played sex	87.4%	69.9%	65.2%	79.7%	52.8%	47.3%	49.5%
N= have played sex	127	360	377	141	399	1770	828
Engaged in sex in the past three mths	22.8%	25.8%	33.4%	29.8%	32.8%	30.5%	21.8%
Condom used at last sexual intercourse	18.1%	18.1%	26.0%	17.0%	19.5%	29.8%	18.7%
GIRLS N=	931	1264	1179	727	950	3441	1844
Refused to play sex in the past 3 months	12.2%	19.7%	14.8%	16.4%	15.5%	*37.1%	*31.2%
I was not asked to play sex	76.9%	52.5%	62.4%	56.3%	57.2%	17.5%	19.7%
Recently chosen not to go somewhere to avoid sex	32.7%	30.0%	21.7%	20.8%	23.2%	36.7%	34.4%
Situation hasn't occurred	---	---	---	---	---	11.5%	12.9%
I am not sure	26.2%	21.5%	25.6%	19.9%	31.2%	---	---
Never played sex	96.0%	91.5%	91.9%	79.6%	92.5%	51.8%	75.3%
N=have played sex	37	107	96	148	71	1659	446
Engaged in sex in the past three mths	43.2%	23.4%	32.3%	28.4%	29.6%	28.0%	20.7%
Condom used at last sexual intercourse	21.6%	15.9%	22.9%	14.2%	36.6%	23.9%	18.0%

* The Wave 1 version of this question asks "Have you **ever** refused to play sex".

With the exception of boys in western Kenya, and girls in Mount Kenya, pupils in the new regions were substantially less likely to report having ever engaged in playing sex than were pupils in Nyanza and Rift Valley. Such reports were lowest in NFI schools where fewer than 4% of girls and 13% of boys reported such activity. This compares to 48% of girls and 53% of boys in Nyanza reporting playing sex in the baseline survey. Even regions with the highest proportions reporting sexual activity were only 47% for boys in western Kenya, 35% in UC, and 20% for girls in MKFI schools. Fewer than 8% of girls in the remaining regions reported having engaged in sexual activity. One curiosity in these data is the sizable difference in percentages for girls and boys and even in their rank ordering with respect to regions with the highest percentage reporting sexual activity.

NFI boys and girls provide a profile of youth who are consistently unlikely to be sexually active. They were consistently most likely to report that they didn't need to refuse sex in the past 3 months because they weren't asked and most likely to report they had recently chosen not to go somewhere in order to avoid playing sex. This compares with boys and girls in NIS who were most likely to have refused playing sex. MKFI boys, on the other hand, were least likely to report having refused to play sex in the past 3 months as well as to have avoided playing sex by choosing not to go somewhere. However, they had the second highest percentage of boys reporting that they had not been asked to play sex and have never played sex.

Considering sexual activity in the past 3 months, girls in NFI schools were most likely and in NIS schools least likely to report recent sexual activity; whereas, it was boys in UC who were most likely and in NFI schools who were least likely to report such activity.

These survey results differ considerably from teacher speculations in focus group discussions. Teachers reported that they believed high percentages (50-90% in WKDPA, up to 80% in NIS schools) of youth were sexually active in their schools. Teachers in UC school reflected that girls in class 3 were already fighting over boys. Teachers in NIS schools reported that in one school, pupils have a place called 'Green land' where boy/girlfriends go and that pupils even played sex in classes and did not keep their friendships a secret. As a teacher in western Kenya reflected:

I want to believe that all those who have known it, do it. There is nothing to them like abstaining (718-719).

Teachers did state, however, that they believed pupils would not respond honestly to questions about their sexual activity.

Boys who were directly asked in pupil focus groups whether they had played sex tended to deny or minimize it. In one school in NIS, all the boys denied playing sex, but then one later stated that he had more than 10 partners. Four of the five participants in another group in WKDPA said that they had limited sexual experience, having played with no more than 3 partners and, in one case, having only played with one partner, one time. As is common with direct questions on sensitive issues in a group setting, these may be reflections of perceived norms rather than accurate reports of behaviour.

Turning to condom use, this was highest for boys in UC and girls in WKDPA schools and lowest for boys and girls in MKFI schools. With the exception of girls in WKDPA schools, the percentage of pupils reporting condom use at last sex was lower than at baseline in Nyanza schools. This is somewhat surprising in light of the more positive attitudes, greater knowledge, and more open communication about condoms found in these focus groups than in those in Nyanza and Rift Valley.

- For boys the second most common partner was a girl who was out of school (9-15%).
- For girls, an out of school boy was the second most common partner for pupils in UC (22%), MKFI (8%) and WKDPA (23%) schools but a secondary school student for those in NIS schools (13%).
- Girls in NIS, UC, and WKDPA were less likely than boys to report their most recent partner was a primary school pupil (girls 56-79%, boys 80-84%).
- Although girls were most likely to report their first partner was 14 years or younger, 31% of girls in WKDPA, 29% in UC, and 18% in NIS schools reported their first partner was between 15 and 16 years of age.

These results were also reflected in focus group discussions where it was suggested that boys tended to be one or two years older than their female partners. However, in rare occasions, girls were older. Partners who were age mates could be from the same school, a neighbouring school or out of school.

Pupils in all regions confirmed the presence of adult partners in rare occasions, including both sugar daddies and sugar mommies. Urban Coast girls reported the highest percentage of first partners who were older than 16 (16%), while 6% of girls in NIF reported their most recent partner was an adult. In rare situations, this included relationships between pupils and teachers.

There are teachers who call girls into their offices and they do sex with the girls (W1UCMBoys3:171-2).

Pressure to Engage in Sex

Because of the picture of lack of agency portrayed in FGDs with pupils in Nyanza and Rift Valley, a series of questions were created to tap the degree to which pupils experienced situations that pushed them to engage in sex. These were not part of the original baseline surveys in Nyanza and Rift Valley, but were part of all surveys after that point. Responses to these questions are reflected in the 'pressure to play sex' scores in the table below. This is a composite of answers to 8 questions about having been pressured or forced to engage in sex as a result of various experiences.

Table 17: Mean Scores on Pressure Scale and Percentages of Pupils Reporting Experience of Each Pressure Item by Sex and Region – All Pupils

Scale range 0-10	Region				
	NFI	NIS	UC	MKFI	WKDPA
BOYS N=	1004	1196	1082	696	845
Mean Pressure to play sex	.71	1.24	1.66	1.25	2.05
My body felt desire, it was pushing me to play sex	12.5%	26.3%	31.3%	14.9%	43.1%***
My friends were pushing me to play sex	8.9%	9.0%	12.0%	13.6%	21.5%***
Older people were telling me I should play sex	3.3%	5.9%	10.6%	8.3%	14.3%***
My boyfriend/girlfriend wanted to play sex	11.7%	22.2%	30.8%	19.1%	35.1%***
I had been given a gift or money and had to play sex	2.2%	5.4%	9.1%	8.2%	9.1%***
Someone had arranged for me to play sex	5.3%	7.1%	8.4%	11.2%	11.5%***
I didn't know how to refuse	10.2%	19.4%	25.1%	18.5%	24.0%***
Someone physically forced me to play sex	2.5%	3.8%	5.8%	6.0%	5.7%***
GIRLS N=	931	1264	1179	727	950
Mean Pressure to play sex	.32	.62	.44	.76	.77
My body felt desire, it was pushing me to play sex	4.5%	6.3%	4.7%	16.1%	5.2%***
My friends were pushing me to play sex	4.5%	5.6%	3.7%	8.7%	10.1%***
Older people were telling me I should play sex	1.9%	4.4%	2.2%	5.9%	6.5%***
My boyfriend/girlfriend wanted to play sex	4.3%	9.6%	8.2%	13.1%	10.6%***
I had been given a gift or money and had to play sex	2.0%	5.0%	3.6%	2.9%	4.5%**
Someone had arranged for me to play sex	2.5%	5.1%	3.7%	4.3%	7.7%***
I didn't know how to refuse	4.9%	11.2%	7.9%	8.4%	14.3%***
Someone physically forced me to play sex	1.2%	2.2%	1.4%	1.8%	2.6%

Significant difference across regions at: * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

Table 17 is based on the responses of all boys and girls, whether or not they have engaged in playing sex. Given the relatively low percentages who report ever having played sex, percentages in responding to each of the questions on whether particular experiences have led them to play sex were, necessarily, low since those who had never played sex would score '0' (or 'no') for each of the above items. Table 18 is identical to 17 except that it only includes pupils who reported that they had engaged in sexual intercourse. Of necessity, all percentages were higher. The patterns of responses, however, were the same across both tables.

Table 18: Mean Scores on Pressure Scale and Percentages of Pupils Reporting Experience of Each Pressure Item by Sex and Region – Only Pupils Who Have Engaged in Sexual Intercourse

Scale range 0-10	Region				
	NFI	NIS	UC	MKFI	WKDPA
BOYS					
N=	127	360	377	141	399
Mean Pressure to play sex	2.84	3.07	3.41	3.75	3.55
My body felt desire, it was pushing me to play sex	65%	74%	73%	54%	79%***
My friends were pushing me to play sex	22%	18%	19%	36%	34%***
Older people were telling me I should play sex	10%	12%	19%	20%	21%**
My boyfriend/girlfriend wanted to play sex	53%	58%	64%	57%	62%
I had been given a gift or money and had to play sex	5%	11%	18%	24%	19%***
Someone had arranged for me to play sex	16%	16%	15%	29%	17%**
I didn't know how to refuse	37%	44%	49%	51%	39%**
Someone physically forced me to play sex	20%	12%	17%	30%	12%***
GIRLS					
N=	37	107	96	148	71
Mean Pressure to play sex	3.41	3.47	3.07	2.76	4.03
My body felt desire, it was pushing me to play sex	62%	45%	47%	68%	41%***
My friends were pushing me to play sex	19%	30%	26%	26%	52%***
Older people were telling me I should play sex	16%	15%	12%	18%	21%
My boyfriend/girlfriend wanted to play sex	59%	57%	62%	52%	62%
I had been given a gift or money and had to play sex	19%	27%	23%	7%	45%***
Someone had arranged for me to play sex	27%	22%	21%	14%	20%
I didn't know how to refuse	40%	55%	39%	26%	46%***
Someone physically forced me to play sex	30%	26%	17%	9%	35%***

Significant difference across regions at: * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

The score on the pressure scale was significantly higher for boys in MKFI, WKDPA, and UC schools than it was for boys in Nairobi schools. For girls, it was only WKDPA schools that were significantly different than other schools, with their scores the highest.

The patterns on specific scale items that are evident in Table 18 are:

- The most common experience that pupils reported as leading to sexual activity was
 - a feeling of desire for boys (54-79%) followed by having a girlfriend who wants to play sex (53-64%);
 - having a boyfriend who wants to play sex (52-62%) was as common as feelings of desire (41-68%) for girls.
- Not knowing how to refuse was the third most common experience leading to sexual activity for both boys (37-51%) and girls (26-55%).
- Girls in all communities except for MKFI were more likely than boys to report that having been given a gift, someone else arranging for them to play sex, and being physically forced were factors that led them to play sex.

- The influence of friends and older people varied across the five regions.
- While pupils in NFI schools differed from those in other schools in their responses to many of the questions on the survey – e.g. being either consistently higher or lower than the rest – this was not the case with respect to their answers on this set of questions where they were neither consistently higher nor lower than pupils in other regions.

Logistic regression analyses were conducted to examine the strength of the influence of these pressures and the overall scale score on ever having engaged in sex and having done so in the past 3 months. The pattern of results was the same for both ever engaging in sex or having done so in the past 3 months:

- All items, as well as the overall scale score, had a significant influence on both measures of sexual activity. This was the case for both boys and girls. This is not surprising since the questions asked whether each item had influenced the respondent to engage in sex.
- For boys, the item with the strongest influence was having been pressured by older community members, followed by having someone else arrange the sexual encounter. The least influential was being physically forced and having a sense of desire.
- For girls, the item with the strongest influence was being given a gift or money, followed by having a boyfriend who wanted to play sex. Of note is that being physically forced was the third most influential factor. The least influential was having someone else arrange the sexual encounter or having friends who pressured you to play sex.
- The effect of the overall pressure score had the strongest influence on the sexual activity of boys in MKFI, followed closely by NFI and WKDPA. For girls it had the strongest influence in NFI schools followed by UC schools (with the least influence on girls in WKDPA schools).

Overall, these results suggest that there is a gendered pattern of influence of pressure where one's own desire and other community members have the strongest influence on boys while gifts and a boyfriend's desires have the strongest influence on girls. While few pupils reported being physically forced, this was a more common experience and had a stronger influence on girls than on boys.

Pupils in focus groups from all five regions discussed parallel sources of pressure to play sex.

Biological pressures and being tempted by visually pleasing potential partners existed as a result of adolescence, although they tended to be more salient for boys than girls. Participants in UC were more likely to indicate that access to pornographic videos and television programmes stimulated some, usually boys, into playing sex.

Discussions of peer pressure suggested that both boys and girls were frequently faced with friends who spoke of their experiences playing sex and subsequently pushed others to play sex out of jealousy, curiosity, or in order to avoid being 'left behind'.

Boyfriends and girlfriends were also pressured by concerns with maintaining the relationship.

When your boyfriend tells you he will leave you because of not playing sex with him and you really like him you will end up having sex (W1NISGirls4:388-9).

They tell the girls that when they grow up they will marry them, so they could just be having sex (W1UCMGirls3:124-5).

In all communities, gifts were a prelude to playing sex. The type of gifts given varied by region from food and bread in MKFI, to household goods, including mobiles and televisions, in UC.

Teachers also discussed the factors pushing youth to be sexually active. In NFI schools, teachers and community representatives identified the primary sources of pressure to engage in sex as exposure to parents' sexual activity, drugs, peers, boys aroused by the behaviour and dress of girls.

So they are attracted and they will be forced by circumstances of the situation is no longer in control (1042-1043).

Watching videos with kissing and cuddling was also thought to stimulate youth.

Then psychological gets in to their head and they would like to experiment after experimenting once they would like to go on. To him there is nothing wrong because people are doing it (1047-1049).

It was said that boys would use anyone to satisfy their urges.

If they miss the girls who are their age mates then they would go for prostitutes and the older women do not care what they care for is the money (1071-1073).

Girls, however, were thought to be more likely to conceal their sexual activity because they did not want to be thought of as cheap. Sex is connected to reproduction for girls:

So if the girl child is mature then she is expected to bring up a family (1064-1065).

Teachers in UC schools felt the main pressures came from peer groups, curiosity, habit, a desire for money/poverty, a desire for status, being a victim of circumstance, exposure to videos & drugs, idleness, biological urges, and girls flirt excessively with boys. In addition, teachers pointed out that girls may see their mothers with many visitors ('uncles') and want to follow suit.

Tradition was also seen as creating pressure:

Yes, they think that amongst themselves its like during the tradition days fathers used to say that when you have one wife then you are not a man (1278-1280).

Traditional norm's also contribute a little there is a certain tribe in Eastern province that a lady before getting married she must have broke her virginity. Therefore she must engage in sex secretly at her own time. If she is a virgin she is sent off to the mother to dig the farm until she looses her virginity (1582-1586).

In MKFI schools, teachers attending training in Nyeri identified the main pressures as peers, poverty, cultural beliefs (need to prove manhood inferred during initiation ceremonies), media (want to experiment based on what they see), and failure of parents to provide the necessities. Some parents think it is 'natural' for boys and girls to play sex; others are shocked or deny that their children are playing sex.

In MKFI boarding schools, pressures came from youth wanting to discover themselves, being adventurous, copying their friends, girls being enticed by boys with money, and peers fooling them with misinformation – e.g., breasts won't grow or penis won't lengthen without playing sex.

I would also add wrong mates; you find for example a peer with wrong information that if they don't play sex their breasts will never grow may advise a girl. So sometimes they are misinformed and are driven into it

The same also applies to boys they are also given such scary information like if they don't do it their penis will not lengthen (1033-1037).

Some girls were pressured by parents to exchange sex for money if the mother was sick.

In WKDPA teachers felt pressures came from peers, drugs, videos, funerals, boys taking advantage of girls when they are collecting firewood, girls wanting to gain status by having highly respected boyfriends, and television – e.g., a respected football player is advertised as having his own condom:

Look at this case of Dennis Oliech. He is a footballer and he is 19 years the radio is using him television that he has his own condom and you? The boys will want to be like Oliech (775-777).

Unique to WKDPA, teachers felt vibrators enticed girls.

The girls use the vibrator. It awakens the desire to have sex

* Q: *How do they get the vibrator?*

They buy.

There was one vibrator at Mukumu girls.

* Q: *Do girls in your school know about vibrator?*

The one I have heard is in secondary (963-970).

Some girls, however, were able to use communication skills to resist pressure.

It also depends with the way the girls respond to that harassment because if the girl has good communicational skills she will refuse and the boy will turn away and go (873-875).

Conclusions

Considerably fewer youth in the new regions were sexually experienced than was found in Nyanza and Rift Valley. However, the dynamics of sexual experience were the same with a considerable number of factors pushing or forcing youth to engage in sex and evidence of similar sexual scripts.

Engaging in sex brought status and, for girls, also gifts and money. The latter was especially salient in regions with high rates of poverty. Traditions and traditionally taught expectations of boys pushed boys to be sexually active to show their maturity and manhood.

Despite positive attitudes, better knowledge, and greater exposure to information about condoms, rates of condom use were very low among those who were sexually active.

CONCLUSIONS

The five regions included in this report present profiles of student populations, social circumstances, and knowledge, attitudes and behaviours related to HIV and AIDS that are different from each other and from those found in the Nyanza and Rift Valley schools that participated in the full evaluation. This will provide a good test of the transferability of PSABH in different regions of Kenya.

What is evident from these baseline data is that while there is teaching about HIV and AIDS in classroom subjects in these new sites, the kind of participatory, co-curricular activities encouraged in the PSABH training are not prominent in these schools. It is precisely these latter types of activities that have been demonstrated to be important in changing pupil attitudes and behaviours in other HIV intervention programmes. It is anticipated that the take-up of such activities following training will provide an impetus for attitude and behaviour change. Little change is anticipated in the sexual behaviours of pupils in most regions, however, since these are already low. In most regions fewer than 10% of girls and 20% of boys report that they have ever engaged in sexual intercourse. Evaluation of the impact of PSABH will have to consequently focus on assessment of how well pupils increase behaviours associated with refusing or avoiding sexual activity and with maintaining this low rate.



APPENDIX A: FINDINGS AFTER 18 AND 30 MONTHS IN SCHOOLS – NYANZA PROVINCE

Findings After 18 Months

Primary School Action for Better Health - an HIV/AIDS behaviour change intervention that has proved effective in 2,000 Kenyan primary schools (pupils aged 11 – 17 yrs). Based on evaluation of 80 target compared to 80 control schools.

Pupil Behaviour and Attitudes

ODDS RATIOS ³			Statistically Significant Changes From pre- to post-programme, target schools compared to control evidenced significantly:
	Boys	Girls	
<i>Sexual debut past year</i>	.62***	.60***	1) Lower sexual initiation among boys and girls. 2) Fewer boys and girls reporting they ever played sex. 3) More girls reporting forced sex. 4) More boys reporting avoiding places in order to avoid playing 5) More girls reporting condom use at last sex
<i>Ever played sex</i>	.80**	.86**	
<i>Never forced</i>	1.11	.87*	
<i>Avoided a place to avoid sex</i>	1.35**	1.07	
<i>Condom used last sex</i>	1.07	1.53**	
Odds ratios controlling for pre-PSABH control/target differences, age & standard. * p≤.05 **p≤.01 ***p≤.001			

ODDS RATIOS			Statistically Significant Changes From pre- to post-programme, target schools compared to control schools evidenced significantly:
	Boys	Girls	
I definitely can/do:			1) More girls who felt they could say no to sex 2) More girls who believed that 'no' means 'no' Post-programme target compared to control schools evidenced significantly: 3) More girls and boys who felt they could have a BF/GF and not play sex 4) More boys and girls who felt they could tell their BF/GF to wait until marriage to play sex
<i>Say no to sex</i>	1.07	1.30**	
<i>Have BF/GF & not play sex</i>	1.20*	1.30**	
<i>Tell BF/GF wait 'til married</i>	1.15*	1.25**	
<i>Believe 'no' means 'no'</i>	.90	1.20**	
Odds ratios controlling for pre-PSABH control/target differences, age and standard. * p≤.05 **p≤.01 ***p≤.001			

Qualitative Confirmation

Focus group discussions with pupils in target schools conducted post-programme indicated a dramatic shift in pupils' ability to describe concrete methods they now used to avoid or refuse sex. The language they used confirmed that they 'owned' these new behaviour patterns. This supported the observed statistically significant changes.

Pupil Knowledge

ODDS RATIOS (Target mean)/(Control mean)			Statistically Significant Changes
	Pupils	Teachers	
<i>Mean knowledge score</i>	1.04	1.10	1) There were no significant differences over time or between target and control schools on either teacher or pupil knowledge.
Odds ratios controlling for pre-PSABH control/target differences, age and standard. * p≤.05 **p≤.01 ***p≤.001			

³ Odds ratios measure the size of changes in the target schools against those in control schools taking account of baseline difference between target and control. This isolates the net change in the target group. Odds ratios greater than 1 are the easiest to interpret since they reflect how much more likely an event is than its opposite. The odds ratios of an event and its opposite are the inverse of each other. For example, boys were 1.60 and girls 1.67 less likely to initiate sex during the programme in PSABH target than in control schools controlling for pre-programme levels of sexual debut (boys: 0.62⁻¹; girls: 0.60⁻¹). Similarly boys were 1.22 and girls 1.25 less likely to report ever engaging in sexual intercourse (boys: 0.80⁻¹ girls: 0.86⁻¹).

Qualitative Contradiction

Contrary to quantitative findings for knowledge, focus group discussions with pupils in target schools revealed considerable accuracy and breadth of knowledge about HIV/AIDS post-programme. This is compared to pre-programme qualitative findings, which suggested inaccurate knowledge founded upon numerous myths and misinformation. Post-programme pupils in target schools were also able to dispel such myths and misinformation by using reasoning and critical thinking skills. There was ample evidence that pupils in target schools understood how best to stay safe from HIV.

Pupil Responses to the question: How do you stay safe?

“Abstain until marriage; before marriage get tested; wait 6 months and get tested again; if you are clean you do not need condoms; stay faithful to your husband/wife or use condoms.”

Teachers’ Abilities

At all waves of data collection teachers and community leaders presented abstinence as the only truly effective method of preventing transmission and acquisition of HIV. Over time teachers gradually incorporated specific teaching strategies to help pupils remain abstinent as well as increase their sense of personal control and efficacy when it came to sexual decision-making. By the final evaluation pupils and teachers alike were listing positive reasons for abstaining compared to baseline and the intermediate data collection exercise when the main reason for abstinence was to avoid AIDS and death.

Baseline and intermediate analyses suggested discouraging news about condoms as the content of messages delivered to youth was largely negative and at times inaccurate. Teachers struggled with the issue of condoms, not knowing how or if they should talk about them to pupils. Pupils recognized such discomfort on the part of adults but still looked to them for the truth about condoms. By the final evaluation, although teachers still did not publicly support teaching pupils about condoms, there appeared to be more open talk of condoms with youth. While discussions tended to focus on persuading youth against condom use there were more indications of attempts by teachers to acknowledge the preventive nature of condoms. Post-programme, pupils who were sexually experienced had more accurate knowledge about condoms and held more accepting attitudes about condoms than those who had never engaged in sexually activity. The difference was stronger in target than control schools.

School Response

Success Indicators of Basic Model

- Target schools have statistically significant higher levels of a comprehensive, sustainable HIV/AIDS programme integrated throughout school activities.
- Success of programme at large scale (2,000 schools) and resilience in context of teacher strike and introduction of FPE proves robustness of approach suitable for national dissemination.
- High rate of adoption of training in non-target schools by Ministry training teams indicates broad acceptance and self-perpetuating nature of the programme.
- Pupil responses confirm direct relationship between training of teachers and messages delivered and capacity of programme to adjust in response to pupil needs and teachers’ concerns.

Considerations Based on Variations Tested

- High rate of teacher movement (22% schools lost trained teachers to transfer or death over 18 months)
- Additional teachers improves programme implementation levels.
- School visits by trained health workers assists with sensitive topics such as prevention of infection.
- Church leaders are important influences on teachers and pupils.
- Peer Supporters improve nature and level of communication on HIV risk reduction.

Findings After 30 Months

Primary School Action for Better Health - an HIV & AIDS behaviour change intervention that has proved effective in 2,000 Kenyan primary schools (pupils aged 11 – 17 yrs)

The summary below is based on 20 target schools in Nyanza Province that have continued to be followed beyond the 18 month evaluation period. Results here compare the pre-programme to 30 month post programme results only for these schools; there is no comparison with control sites. Because of the absence of control sites, these results must be considered as only supplementary to those reported at 18 months, which included control sites in the analysis.

Pupil Behaviour and Attitudes

ODDS RATIOS ⁴			Statistically Significant Changes From pre- to 30 months post-programme, target schools evidenced significantly:
	Boys	Girls	
<i>Sexual debut past year</i>	.90	.53**	1) Lower sexual initiation among girls. 2) Fewer girls reporting they ever played sex. 3) Fewer girls and boys reporting they played sex in the past 3 months. 4) More girls and boys reporting a condom should be used when engaging in sexual intercourse.
<i>Ever played sex</i>	1.19	.44***	
<i>Sex in past 3 months</i>	.51***	.44***	
<i>Condom should be used</i>	1.58***	1.74***	
<i>Condom used last sex</i>	.91	1.48	
Odds ratio of 30 months post compared to pre scores. * p≤.05 **p≤.01 ***p≤.001			

Effect of Loss of Control Schools

The stabilizing effect of PSABH on the sexual activity of boys in target schools compared to their activities in control schools was only evident when control schools were part of the analysis. Without control schools there appears to be no change in much of boys' sexual behaviours. This should be considered in light of the increases in the sexual activity of boys in control schools evidenced at wave 3.

ODDS RATIOS			Statistically Significant Changes From pre- to post-programme, target schools evidenced significantly:
	Boys	Girls	
<i>I definitely can:</i>			More girls and boys who believed that 'no' means 'no'
<i>Say no to sex</i>	.99	1.07	
<i>Believe 'no' means 'no'</i>	1.45***	1.49**	
Odds ratios controlling for pre to post /target differences * p≤.05 **p≤.01 ***p≤.001			

⁴ Odds ratios measure the size of the changes among the pupil population in the target schools. An odds ratio of 1 represents no change from pre to post programme, a ratio above 1 represents an increase from pre to post programme and below 1 represents a decrease.

Qualitative Confirmation

In focus group discussions pupils demonstrated a continued shift in pupils' ability to describe concrete methods they now used to avoid or refuse sex. The language they used confirmed that they 'owned' these new behaviour patterns. This supported the observed statistically significant changes.

Pupil Knowledge

ODDS RATIOS			Statistically Significant Change
	Wave 1-3	Wave 1-4	
Passing grade on knowledge test	1.08	1.66***	Although there was no significant increase in the likelihood of pupils receiving a passing grade on the knowledge test from waves 1 to 3, there was from waves 1 to 4.
Odds ratios controlling for pre-PSABH target differences, * p<.05 **p<.01 ***p<.001			

Qualitative Confirmation

Focus group discussions with pupils in target schools revealed considerable accuracy and breadth of knowledge about HIV/AIDS post-programme. This is compared to pre-programme qualitative findings, which suggested inaccurate knowledge founded upon numerous myths and misinformation. Post-programme pupils in target schools were also able to dispel myths and misinformation by using reasoning and critical thinking skills. There was ample evidence that pupils in target schools understood how best to stay safe from HIV.

Pupil Responses to the question: How do you stay safe?

"Abstain until marriage; before marriage get tested; wait 6 months and get tested again; if you are clean you do not need condoms; stay faithful to your husband/wife or use condoms."

Teachers' Abilities

At all waves of data collection teachers and community leaders presented abstinence as the only truly effective method of preventing transmission and acquisition of HIV. Over time teachers gradually incorporated specific teaching strategies to help pupils remain abstinent as well as increase their sense of personal control and efficacy when it came to sexual decision-making. Schools were also inviting outsiders, such as health workers, into the school to address the issue of condoms for prevention of HIV transmission. By 30 months after training, (1) pupils and teachers were listing positive reasons for abstaining compared to baseline and the intermediate data collection exercise when the main reason for abstinence was to avoid AIDS and death, (2) pupils were discussing how condoms could prevent HIV transmission, and (3) although teachers still did not publicly support teaching pupils about condoms, there appeared to be more open talk of condoms with youth. While discussions tended to focus on persuading youth against condom use in favour of abstinence, there were more indications of attempts by teachers to acknowledge the preventive nature of condoms.

Programme Sustainability

ODDS RATIOS			Statistically Significant Changes Compared to pre-programme:
	Wave 1-3	Wave 1-4	
Programme implementation	2.17***	2.48***	1) Programme implementation was significantly higher at 18 and even more so at 30 months post-training.
Pupil participation	1.32***	1.18***	
School Health Club present	1.66***	1.35***	
Question box present	4.72***	4.51***	
Odds ratios controlling for pre to post target differences * p≤.05 **p≤.01 ***p≤.001			2) Pupil participation was higher at 18 months, but dropped slightly to 30 months. This was a result of a reduction in question box and school health club in schools.
			3) While school health club and question box were significantly more likely to be found in schools after PSABH training, there was some drop-off in these at 30 months compared to 18 months.

Qualitative Explanation

In focus groups with pupils and interviews with teachers, the fall-off in the question box was attributed to the loss of trained teachers and peer supporters in some schools. The fall-off in the school health club was attributed to activities being taken-up in other school clubs. Both of these accounted for the slight drop in the pupil participation scores.