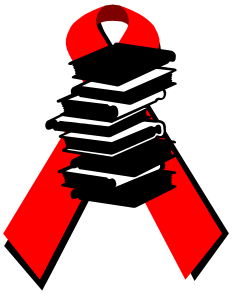

PRIMARY SCHOOL ACTION

FOR

BETTER HEALTH, II

Progress Report:

What Can the Research Show Us To Date?

Presented to: DFID on 13th Sept 2002, Nairobi

Presented by: Eleanor Maticka-Tyndale, PhD (maticka@uwindsor.ca) and Melanie Gallant, MA, University of Windsor.

Managed by: C*f*BT,
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CONTENTS PAGE

INTRODUCTION ……... 2

PRESENTATION …….. 2

A: Playing Sex: What the Research Process Has Shown To Date …… 3

a.1 *What we Learned from the Baseline Surveys* …… 3

a.2 *What we Learned from Interviews and Focus Group Discussions* ……. 4

a.3 *How Playing Sex Happens* …….. 5

a.4 *Why Young Boys and Girls Play Sex* ……... 6

a.5 *Multiple Voices/Competing Realities* …… 7

a.6 *The Voice of Religion* …….. 9

a.7 *Barriers to Abstaining from Playing Sex* ……... 9

a.8 *Putting the Quantitative and Qualitative Data Together* ……..... 10

B: How Does PSABH Measure Up Internationally? ……. 11

b.1 *Challenges Faced by School-Based Programmes and Evaluations* …… 11

b.2 *What Outcomes Can We Expect?* …… 13

b.3 *What Schools Have Been Able to Do* ……... 13

b.4 *Suggestions For and From Best Programmes* ……..... 14

b.5 *Comparison of Project Features* ……..... 15

b.6 *Additional Components of PSABH* ……..... 15

b.7 *Uniqueness of PSABH Monitoring, Evaluation and Research Plan* ……... 16

b.8 *How PSABH Measures Up* …… 17

C: What Can We Say About Cost-Effectiveness? …… 17

APPENDICES

1 *Overview of Evaluations of School-based Programmes in Sub-Saharan Africa* …… 19

2 *Project Overview.*…… 20

3 *Monitoring, Evaluation and Research Plan*…….. 21

REFERENCES …….. 23

ENDNOTES ……... 24

PRIMARY SCHOOL ACTION FOR BETTER HEALTH II
Progress Report

Presented to DFID on 13th Sept 2002, by Eleanor Maticka-Tyndale, PhD (maticka@uwindsor.ca) and Melanie Gallant, MA, University of Windsor.

INTRODUCTION

Primary School Action for Better Health (PSABH) has been working in approx. 1,500 Nyanza and Rift Valley primary schools since January 2001 and prior to that in approx. 350 primary schools in Bondo District and Nakuru Municipality. A great deal of anecdotal experience has been gathered since the first programme began in January 1999 and a formal monitoring, evaluation and research plan was begun with a baseline survey in November 2001. Given the long time periods needed to capture data on changes in knowledge, attitude and particularly, behaviour, the research team was asked to provide a progress report in September 2002. The report took the form of a powerpoint presentation (slides available), in which one aspect of behaviour, playing sex, was followed through the research process. The presentation served to demonstrate the kind of impact information that can be anticipated from the complete MER plan in June 2004. This document is a written version of the same presentation.

The aim of the progress presentation was to provide an overview of when and what kind of impact data could realistically be expected. The research team was also asked to address the three main questions currently facing those involved in determining the future development of this project:

a) What is the impact of the project on the sexual behaviour of young adolescents?
b) Which variations of the model can be tested?
c) What can be said of the project's cost-effectiveness in averting cases of HIV infection?

PRESENTATION

To examine the impact on PSABH on the HIV risk of primary school aged youth, we are assessing how the project affects young people's knowledge, attitudes and behaviours in relation, specifically, to their sexual behaviour. For sexual behaviour we are addressing factors such as the age of first sexual intercourse, whether recent sexual activity has increased or decreased, and the nature of sexual relations, including patterns of force in sex and the use of condoms. In addition, we are monitoring the nature and presence of barriers that inhibit the adoption of sexual behaviours that carry lower risk of HIV transmission.

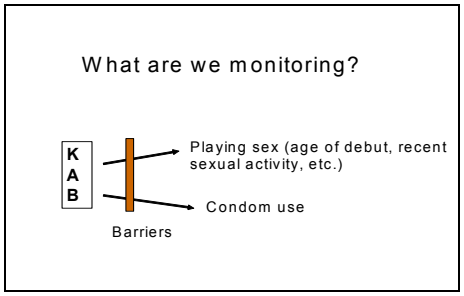

Figure 1: What are we monitoring?

In a school-based programme one works primarily through knowledge and attitudes in order to bring about new behaviours. While knowledge and attitudes have some direct effect on behaviour, we must recognise that other factors come into play that may either facilitate or create barriers for developing new behaviours. Among these are community and peer norms that have powerful influences over young people's behaviours and serve to push them into particular behaviour patterns. Local activities set the parameters for how young people meet and interact. If new behaviours are to be created, young people need access to activities which create situations in which these new behaviours can take place,. For example, in order to abstain from early sex they need opportunities for socialising and activities to help release sexual energy in a new way. In addition, young people need to develop a new set of skills in order to adopt this new behaviour.

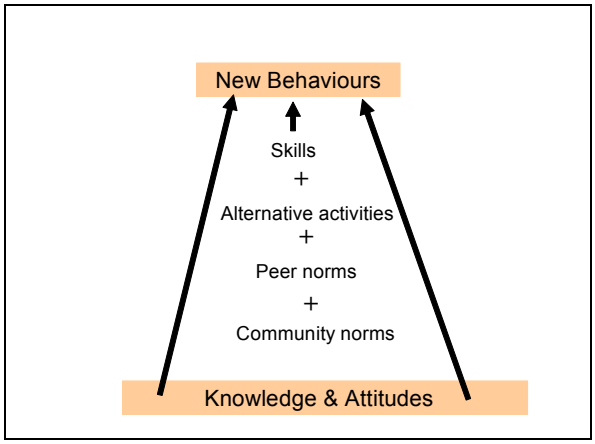

Figure 2: Influence of Knowledge and Attitudes on New Behaviours

A: Playing Sex : What the Research Process has Shown To Date

This presentation takes one behaviour – playing sex – through the research process to demonstrate what we have learned and how this may impact on risk for HIV transmission.

a.1 What we Learned from the Baseline Surveys

Baseline questionnaires with 7903 STD 6 and 7 youth provided information on how youth answered a selection of questions related to their knowledge, attitudes, intentions and behaviours with respect to playing sex.[i] There were no statistically significant differences between target and control schools.

Information relevant to playing sex: baseline questionnaires with 7903 STD 6 & 7 students in 160 Nyanza schools.

KNOWLEDGE -- How can HIV transmission be prevented?

- Avoid playing sex (71%)

ATTITUDES

- God is very important (70% agree)
- Feel in control of their lives (58% agree)
- Do not feel at risk (57% no or little risk)
- Feel they can 'say no' to sex (48% agree)

INTENTIONS

- I will be a virgin when I finish school (54% of those who *had* already played sex & 53% of those who *had not* yet played sex agreed)

RISK PERCEPTION

- My chance of getting AIDS is none or little (57%)

BEHAVIOURS

- Have refused to play sex at least once (36%)
- Have avoided going somewhere in the past month to avoid playing sex (34%)
- Have played sex (53%; median age of initiation for those who have played sex is 11.7 years)
- Have been forced to play sex (34% of those who had already played sex)

Figure 3: KAB Responses on Baseline Questionnaires Relevant to Playing Sex

We were perplexed by some of these results. Clearly there are some apparent contradictions or cognitive discrepancies such as in the question on intentions to be a virgin and the absence of any difference in risk perception between those who have and have not played sex.

When we compared those who had and who had not played sex on KAB, the only differences greater than 5% were in response to questions on having refused to play sex (40% who never played sex compared to 45% who had played sex had, at some time, refused) and having avoided going somewhere to avoid playing sex (35% who never played sex compared to 41% who had played sex had, in the past month, avoided going someplace to avoid playing sex). Knowledge and attitudes did not differ between the two groups. In addition, correlations between variables that have shown strong relationships in other research were not appearing in this baseline quantitative data.

These results suggested that knowledge and perceptions relevant to prevention were at a very elementary stage among these youth; that there was considerable confusion and contradictory knowledge and attitudes present among these youth; and also that the qualitative phase of research was critically important for developing an understanding of how youth were interpreting information and the underlying meanings, foundational scripts, and beliefs of youth.

a.2 What we Learned from Interviews and Focus Group Discussions

To maximize diversity, sites for qualitative data collection were selected to represent Kisii and Luo communities, target and control schools and top and bottom performing schools.

One of the first observations we made from the qualitative data was that for adults and youth alike, being associated with AIDS resulted in tangible, negative consequences. Teachers spoke of being suspected of HIV infection if they taught about HIV. Youth said that carrying a condom or expressing an intention to change your behaviour because of HIV placed them under suspicion of being infected. For both teachers and pupils this suspicion activated a series of harmful responses from community members such as persecution in school or the workplace, victimisation in social contexts and isolation within the community.

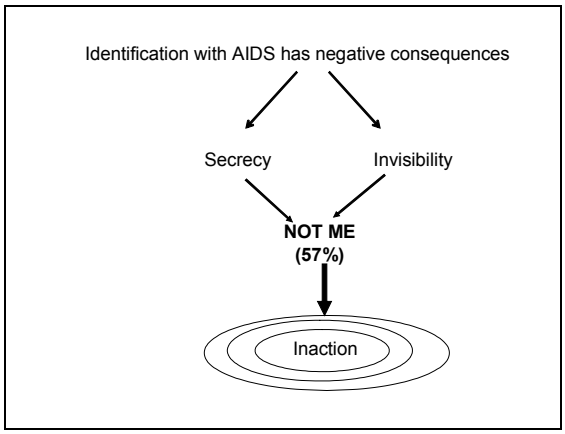

Figure 4: Resistance to Owning the Presence and Risk of AIDS

Such consequences led to widespread secrecy about HIV and AIDS:

> *You will only hear them whispering but they don't say that this is a victim of AIDS (Teacher31_F: 772-773)*
>
> *You just hear somebody is sick and you know in rural areas, no one can reveal the type of disease (Teacher9_F: 160-163).*

And invisibility of HIV or AIDS in the community:

> *I swear I have never heard that this community of ours has that disease called AIDS. I have never heard (Communijty32_F: 94-95).*
>
> *They just can't tell if the person has AIDS or not. (Community7_F:172)*

With only circumstantial evidence, people will not identify others as having HIV however much they believe it to be true.

> *You know they die sometimes they hide they don't talk that AIDS is the one that killed the person or the person has died of AIDS. But we know this is the one (Community10_F: 109-112).*

With this level of secrecy and invisibility it is not surprising that 57% of the young people surveyed did not perceive themselves to be at risk, with experience of sexual activity not affecting this perception. Such a low perception of personal risk leads to inaction and therefore makes positive behaviour change more difficult.

a.3 How Playing Sex Happens

We began focus group discussion with youth with an ice-breaker question about dating and what boyfriends and girlfriends do on a date. Our goal was to use conversations about boyfriends and girlfriends to gradually move the group to talking about sexual activity. The icebreaker was barely needed, as the young people moved very quickly to talking about sexual intercourse, or playing sex. We learned that:

- 'Dating,' or boyfriends and girlfriends spending time together, is very common
- Dating inevitably involves playing sex (even if another activity takes place first, sex comes next).
- A sequence of events and expectations that lead to playing sex (i.e., a sexual script) is always part of dating. Usually this involves a gift, or series of gifts. Once a girl has

accepted a gift she knows she is obligated to pay for this with sex, either willingly or by force. Boys are aware that it is just a matter of giving the right gift. Both boys and girls know that girls are expected to say 'no,' but that they are also expected to eventually 'give in' to the boy's demands. If a girl does not willingly engage in sex, both boys and girls know that it is expected that the boy will rape her, either on his own, or with the help of friends. Older brothers, friends, or aunts are described as playing the role of mediator and receiving gifts in exchange for girls having sex with a third party.

- Once the sequence begins it always ends in playing sex.

a.4 Why Young Boys and Girls Play Sex

The reasons that young people spoke of for playing sex went beyond the existence of strong sexual scripts. Both the script described above and the reasons provided below make young people feel that they have no choice or control over whether or not they have sex. They referred to 'being forced' to play sex by:

(1) Biology: In adolescence or after puberty, sexual urges cannot be denied.

> *When he is in puberty stage it forces him beyond control… He cannot be patient to wait or stop to play sex because when he has reached that age it forces him. (Boys7: 283-291)*
>
> *The sperms reach a point they feel backache so they want to release. (Community10_F: 504-505)*
>
> *From what we read in science girls once they start having monthly periods during the adolescent stage they feel an urge to play sex and only few girls abstain from sex but most of them end up playing sex (boys11: 409-412).*

Some pupils did, however, offer alternatives to sexually acting on their urges or beliefs by releasing these through physical labour for boys or controlling them by praying or turning to religion for girls.

Together with physical urges, young people also held beliefs about being 'spoiled' for the future if they did not play sex (e.g. A girl's vagina will be blocked, a boy will become impotent etc.)

> *Boys believe that if they don't play sex now when they will be married they will be unable...some also think that if they start now when they are young their sperms will mature and...they can be able to make someone pregnant (Boys12: 769-774).*

(2) Peer Norms and Rejection: Young people also spoke of peer group pressures to conform to playing sex. If they don't play sex boys will be called weakling, excluded from the group, beaten up etc.

> *The other boys will not want to associate with him.*
> *Yes they will not want to walk with him.*
> *They can even insult him that you are impotent we don't want to walk with you, walk alone.*
> *You there is nothing you can do even if you remain with a girl here. (Boys12: 438-445)*
>
> *He is a weakling if he refuses sex but the girl wanted (offered).*
> *He does not want this nice things or behaviours.*

They may insult him
It means that you are weak and you do not even know how to talk to a girl.
Question: Apart from weakling, what else they might say?
That you are impotent, castrated
They may stop you from hanging with them, they may beat you, ask you how can we give you a girl and you refuse? (Boys13: 541-550)

Girls were also called names and were excluded from their friendship group.

Sometimes their girlfriends have already told them the sweetness of those things and now she will even want and go to the boyfriend so that she can play sex.

They see their fellow friends receiving gifts and her she doesn't so she starts playing sex (Girls1).

(3) Community and Family Norms: Pressure to play sex also comes from community and family norms that guide the sexuality of young people. Families, for example, often celebrate evidence of a son's virility. This together with the expectation, of many adults, that young people are driven uncontrollably by their biological urges, make it clear to young people that they are expected to engage in sex. And, for some, the evidence of family endorsement of playing sex is the role played by family members or friends as mediators in setting up sexual transactions

(4) Specific Factors For girls: Several factors were only evident for girls. First, playing sex was spoken of as a way to get the things they wanted such as slippers or petroleum jelly; or things they and their families needed, like food.

You know at home if there is no money, the girl thinks that its better I go there I get some money so that I can buy a certain dress. When she sees her friend has been bought by the father and their home there is no even a chicken she sees that its better I go and look for one so that if need arises I can buy (Girls10).

Second, girls knew that even if they refused they would be forced.

She will be given a gift then she will just accept...and if she refuses, she can even get abducted...she is grabbed by force...then she gets raped (Boys12: 161-623).

Third, saying 'no' and being forced were the only honourable ways for a girl to explain that she had engaged in sex. Girls recognized that despite the consequences of refusal, they were <u>expected</u> to refuse to play sex.

If the girl is intelligent enough, she will not accept. But there are some boys who end up forcing them (Girls16: 360-362).

a.5 Multiple Voices/Competing Realities

A second influence on youth is the multiple voices from a range of sources (each speaking of 'truth') that meet, overlap and compete for attention.

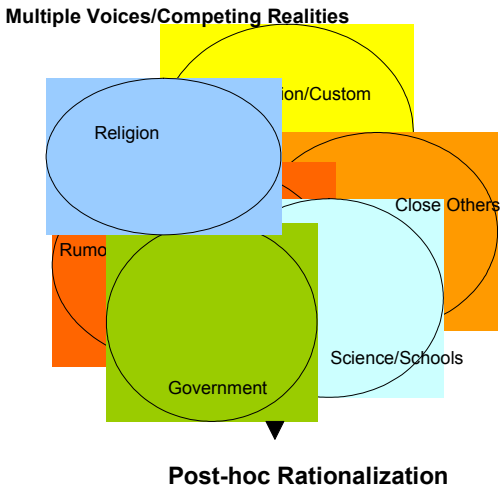

Figure 5: Competing Realities

(1) Tradition and Custom tell young people that, after puberty, sexual urges are too strong to resist. In the past, the time lag between puberty and marriage was brief, so norms proscribing sex before marriage did not necessarily conflict with the 'awakening of strong sexual urges.' Now, with more years devoted to education and the consequent need to postpone marriage, adults believe it is too difficult, some say 'impossible.' for young people to hold those urges in abeyance and abstain from sex until marriage.

> *It is very hard to find them waiting to have sex until they are married. They are still following their traditions; it is just like in the olden days you would not find children going to school they would just be herding cattle … and preparing for marriage. It is not until the government came in and stressed the importance of school that the parents started taking their children to school* (Community13_M: 70 - 77).

In addition, the old traditions for teaching about sex have gone and have not been replaced. We were told that today there is no one who has the authority to speak to young people about sexual matters. This leaves young people without an established normative pattern or script that fits their lives and without any adult guidance to help develop a new script.

(2) The Voice of Religion is clearly a strong force in peoples' lives. The religious voice does not engage with the traditional one. It teaches that abstinence until marriage is the only way for Christians, but does not address traditional beliefs about sexual urges and the need to act on them. Conflicts between tradition and religion were regularly described as confusing and worrisome.

(3) Close Friends, including peers, agemates, and at times family members, typically encouraged or at least condoned sexual activity. Few saw any alternatives for youth, citing traditional beliefs about sexuality to explain the sexual behaviours of youth.

(4) Popular Media portrays a world of love, sex and romance as the only desirable state.

(5) Rumours abound about what will happen to you if you abstain. One of the most worrisome, for young people, was that they would not be able to fulfil their adult reproductive role if they didn't have sex at an early age

(6) The Government gives out mixed messages. While the importance of abstinence for reducing HIV rates is evident, the message circulated during family planning campaigns that 'having sex builds a stronger Kenya,' is also still heard.

(7) The School, using 'scientific' explanations of how abstinence is the only *certain* way to prevent HIV, other STIs, or pregnancy, provides yet another voice.

When so many mixed and competing messages are circulating, youth often merely act based on the prevailing situation rather than with planning or forethought. Later they select messages from all those that are present to explain their behaviour. Thus, the messages become post hoc rationalizations of actions rather than being incorporated into a rational planning process. In questionnaires the many, often contradictory, voices guide their answers, producing contradictory responses. For example, when virginity until marriage is what schools and churches encourage, youth know this is the 'right' answer for what they 'intend' or 'should' do, especially if the question is being asked in school. So, they provide this answer, even if they are no longer virgins.

a.6 The Voice of Religion

Religion was one of the strong competing voices. Although interview questions did not specifically ask about religion, all respondents referred to their religion and church when providing reasons for their answers. People *expect* their religion to be engaging with the issue of HIV/AIDS. It is evident that the church *is* engaging with the issue. There were many examples of sermons, church programmes for youth and adults, and counselling for couples, all of which addressed HIV and AIDS. The message of religious groups is consistently that of abstinence as the only way to prevent infection. Condoms are described as flawed, dangerous, and against the Christian way. Abstinence is presented as a simple, straightforward expectation with little or no talk of how to deal with pressures to play sex.

Adults feel that being religious is enough to lead to moral behaviour (i.e., abstention) and that young people who are saved or who go to church are safe from HIV.

> *Madam, those who are faithful, those God has spoken to and they will get saved again, they will not get that disease.*
>
> *Those girls who wait are those who go to church. They are taught in church how girls are supposed to live.*

They also acknowledge that there are those who are strongly religious, who violate this moral code.

> *Some of us might be involved in doing this immorality with students so it becomes a problem to tell them "to stop playing sex"*

a.7 Barriers to Abstaining from Playing Sex

It seemed that levels of self-reflection were lower among the youth and adults that we interviewed than is found in western cultures. This has also been observed by educators and counsellors. It is difficult to engage people in reflection on how their behaviours, beliefs, attitudes or intentions relate to what they know. Because of this, approaches to keeping adolescents from playing sex have focused on managing their time and interactions rather than asking them to engage in self control. This can work in a society

that has strict barriers to girl-boy interaction (e.g., where girls and boys are strictly segregated). However, when youth interact on a day-to-day basis, it is more difficult to enforce a norm of abstinence, particularly when it coexists with beliefs about strong sexual urges. In the absence of self-reflection, abstinence is put forward as the only legitimate way to avoid infection with HIV, yet young people and adults alike express serious doubts that youth can actualise that 'no'. The barriers to abstaining that were evident in this work included:

- General resistance among youth and adults alike to 'owning risk.'
- Absence of differentiation between dating and playing sex – one could not date and not play sex.
- Rigid sexual scripts which, once initiated, ensured that playing sex was always the outcome.
- Youth perceiving that they were 'forced' to play sex by a wide variety of factors.
- An increasing lack of communication about sexual matters with this generation.
- The absence of consistent support for abstinence.

a.8 Putting the Quantitative and Qualitative Data Together

These qualitative results led us to reconsider interpretations of survey findings.

QUANTITATIVE DATA	**QUALITATIVE INSIGHT**
KNOWLEDGE: How to avoid transmission	
Avoid playing sex (71%)	But young people feel unable to avoid playing sex
ATTITUDES:	
God is very important (70%)	The church says abstinence is the only way
Feel in control of their lives (58%)	Youth do feel in control of their sexuality
Do not feel at risk (57% little or no risk)	Secrecy and invisibility of HIV/AIDS endorse the 'not me' factor
Feel they can 'say no' to sex (48%)	Youth describe how this is simply not possible
INTENTIONS:	
I will be a virgin when I finish school (54%/53%)	Strong focus on abstinence encourages post-hoc rationalisation
RISK PERCEPTION	
My chance of getting AIDS is none or little (57%)	Given the invisibility & secrecy about HIV not many see HIV as personal danger.
BEHAVIOURS:	
Have refused to play sex at least once (36%)	But girls know that refusal does not necessarily prevent sex from happening.
Have avoided going somewhere in the past month to avoid playing sex (34%)	This may be one of the few ways youth can actually avoid some sexual activity.
Have played sex (53%)	Dating requires playing sex.
Have been forced to play sex (34%)	There are many meanings of 'force' – for young people 'force' means they do not feel they can make choices about their sexuality.

Figure 6: Combining Quantitative & Qualitative Results

B: How Does PSABH Measure Up Internationally?

As part of her doctoral programme, Melanie Gallant, a PhD student from the University of Windsor conducted a review of school-based HIV prevention programmes in sub-Saharan Africa that had peer-reviewed published evaluations. Ten such programmes were found. They varied in format, length, sustainability and involvement of schools and communities. As is evident in the attached table, not all took behaviour change as the objective – 2 attempted to change knowledge; 5 knowledge and attitudes; and 3 behaviours. See Appendix 1 for a chart comparing these programmes.

With the exception of one programme in Uganda (Kinsman et al., 2001), all programmes were able to affect an increase in knowledge, most to shift attitudes in a direction that is often associated with positive behaviour change, however, behaviours proved more difficult to change. Only one programme, a Ugandan programme that shares similarities with PSABH, evaluated by Shuey et al. (1999), produced a change in sexual initiation. While 43% of STD 7 youth said they had played sex at baseline, only 11% of a comparable sample of STD 7 students said they had played sex after 2 years of receiving this programme. Only one programme was able to produce an increase in reports of ever having used a condom. This was a South African intervention with STD 8 students evaluated by Harvey et al. (2000). While the Nigerian programme evaluated by Fawole et al. (1999) also produced a positive change in condom use, there were aspects of this programme that made it clearly non-sustainable and impossible to 'scale up.' Consequently, its results are not very useful to the context of risk-reduction on a large scale.

Of note is that an earlier evaluation of the Bondo District PSABH compares favourably with these evaluations, with the struggles in effecting change related to condoms shared across many of these programmes.

b.1 Challenges Faced by School-Based Programmes and Evaluations

This review of the literature, together with our own experiences, highlighted a consistent list of challenges that were faced by school-based programmes in sub-Saharan Africa. The success of interventions, as well as their sustainability, has a strong relationship to how the programmes meet the challenges.

- All programmes face a poverty of resources within the schools and in the infrastructures that support the schools.
- Many schools have no electricity, making it impossible to use audio-visual resources.
- Many are also without telephones necessitating a visit to the school for any communication purposes. Such visits are made difficult by poor roads which at times require visitors (trainers, monitors, researchers) to walk several kilometres in order to reach the school.
- Basic resources such as pencils, paper, and art supplies are in short supply.
- High rates of attrition of teachers as a result of transfer, illness or death make it difficult to keep a trained teacher in the school.
- Classes in lower grades are large and classrooms small, making it infeasible to have children moving about the room for small group work.
- Drop-out rates are high, particularly in upper grades, producing a large cadre of out-of-school youth who are not reached by school-based programmes and who may offer an alternative 'voice' and set of norms to the ones taught in school.

- Cultural norms and practices differ between tribal groups and are often profoundly different from those in countries of the north, where intervention and evaluation models are often developed and funded. Unless local culture is taken into account, interventions are not likely to speak to the needs and experiences of local youth. Yet there may be many, diverse local cultures in any one school, each with leaders who oppose any intervention that challenges long established traditions, beliefs and practices.
- Teaching is primarily didactic, learning is through recitation and memorization. In-class discussion, debates (teachers will say topics are not debatable since there is a 'right' answer), role play and other participatory learning techniques are not easily introduced. Yet, these are the techniques that have been found to be most powerful in changing attitudes and behaviours in programmes evaluated in the north.
- Missionaries originally built many schools and, though governments have taken over education in many countries, the influence of the local church remains strong and teachers fear for their jobs if they contravene church teachings.

High tech, resource intensive interventions, interventions that require the presence of outsiders, interventions that challenge local traditions, interventions that contravene teachings of religious groups, all risk failure because of infeasibility. Several of the evaluation articles spoke of the difficulties and failures that they faced, rooted in their inability to successfully overcome the above challenges.

Research and evaluation face similar challenges. Survey instruments, scales to measure various attitudes or beliefs, have been developed in the north, with few tested in the African context. This leaves most researchers to develop their own measurements based on prior exploratory research or modification of instruments used in neighbouring countries. But these are inadequately tested and not always carefully developed, leaving interpretation of results open to question. Besides the challenges listed above, research and evaluation faces additional ones:

- Schools may include children who speak a diversity of local dialects, some of which do not have words to describe the concepts to be measured.
- Selection of research sites is hampered by incomplete records (you may reach a school that is expected to have STDs 1 through 8 to find it only has through STD 3) and difficulty in communicating with potential sites.
- Research teams must often be transported from distant municipalities and themselves have to carry all their research tools and equipment (e.g. surveys, tape recorders, many batteries) when roads give-out. Several trips are required to reach schools, explain the research, obtain agreement to participate, collect data, and debrief communities.
- If teachers are included as research subjects they may not remain at the same site for the duration of the study.
- School schedules – time of exams, and classes leading up to important exams, and school breaks – must be accommodated both in plans to train teachers and in data collection.

The demands of donors for rapid results rarely coincide with the time required to effect change and are often in direct conflict with the accommodations required to fit the training of programme implementers, programme implementation, and data collection and analysis into the cycles of school life. Thus, many evaluations are of only immediate or very short-term results. This timetable often limits programme objectives to those of improving knowledge and, perhaps, effecting some change in attitudes since these are most

sensitive to short term change. Behaviour change, which requires a longer time, is typically omitted from testable programme objectives.

b.2 What Outcomes Can We Expect?

We can also learn what kinds of change can be expected at different time intervals from the results of other school-based African programmes.

These possibilities are important to keep in mind when planning evaluation timelines and timelines for making decisions about the future of programmes.

Short Term (6 mths post)	**Medium Term (18 – 24 mths post)**
Based on evaluations of existing school-based programmes in Africa.	
Some decrease in sexual debut	Established behaviour patterns begin to show signs of change
Increased commitment to act	Younger children less likely to repeat problematic patterns of past (e.g. Delay sexual debut)
Teacher and community recognition of points of vulnerability for youth	School and community plans and beginning action on points of vulnerability
Increased communication	
Knowledge increase in non-contentious areas (e.g. condoms)	Knowledge increase including inroads into contentious areas (e.g. condoms)
Some changes in pedagogy	More changes in pedagogy
Structural implementation	Program embedded within infrastructure

Figure 7: Feasible Short and Medium Term Programme Objectives

b.3 What Schools Have Been Able to Do

School-based initiatives that have been able to rise to the programme and research challenges have been able to change behaviour. A consistent set of themes was echoed across many of the evaluation reports.

Behaviour change that has occurred	
Among pre-project virgins	**Among pre-project non-virgins**
• Were more likely to stay virgins when exposed to the programme • When they initiated sex they are more likely to use condoms	• Very difficult to get any behaviour change • Non-virgins do not become virgins (i.e. did not take up celibacy) • At best, there was a decrease in recent sexual activity or number of partners and/or frequency of partner change • In one programme, there was an increase in the numbers reporting they had used a condom once

Figure 8: Behaviour Changes in School-Based Programmes

In sum, it was easier to establish lower risk behaviours among those who had not yet initiated playing sex than to change higher risk behaviours into lower risk among those who were already sexually active.

b.4 Suggestions For and From Best Programmes

(Source: International Conference on AIDS, 07/02)

Informal discussions took place during the International Conference on AIDS held in Barcelona, Spain in July 2002 among those who are working on school-based HIV and AIDS education interventions. Discussions produced several suggestions for maximizing the effectiveness of school-based programmes based on the experiences of those working in the field:

- Since establishing behaviours is easier than changing them and relapse is a strong probability, programmes should start before puberty and continue throughout schooling.
- The more diversity in pedagogy the better (e.g. role-play, song, drama, question boxes etc.) Different people may deliver different types of programming.
- Consistency, clarity and reinforcement of prevention information are essential. In all African countries represented in these conversations this was most difficult for the condom message. Health personnel appear to be in a better position than teachers to deliver information about the role of condoms in risk reduction. The major barriers here are the church and traditional beliefs about condoms. However, there were some 'condom endorsing' initiatives reported within the Christian community. In Uganda some religious leaders are coming together to deliver a positive message about condoms. In South Africa, World Vision has had some success in getting endorsement for a positive message about condoms by using weeklong training sessions with religious leaders. Despite the resistance and difficulties the school programmes experience in presenting condoms as a method to reduce risk, the consensus appeared to be to continue working on this rather than to give up. However, given the pervasive difficulties, success with 'condom messages' should not be used as the sole or primary outcome criterion in programme evaluation.
- Practical life-skills related to sexual health and sexual negotiation should be taught since these are generally not in the repertoire of African youth.
- Gender imbalance needs to be addressed. Boys and girls will need some separate work in order to address their separate roles.
- Over the long term, HIV prevention works best when infused throughout the school curriculum rather than when delivered in distinct sessions separated from regular school work.
- Peer education is a powerful way to reach youth.
- Strong school/community partnerships keep these two from being pitted against each other.
- Adequate training and support for teachers is essential. Teachers are members of their communities and experience the same pressures and competing messages as youth. They cannot stand alone against their communities and are unlikely to quickly change from beliefs and attitudes that are contrary to effecting desirable change to those that are supportive. Programmes that leave teachers 'on their own' to implement have consistently failed.
- On-going monitoring insures that teachers and schools do not fall short of implementing this particularly difficult area of education.

b.5 Comparison of Project Features

	SHUEY et al. (1999)	KLEPP et al. (1994, 1997)	PSABH
Targeted Outcomes	Sexual behaviours	Knowledge and attitudes	KAB related to sexual and condom use behaviours
Intervention Implementers	1 science & 1 senior teacher	2 teachers & 1 health worker	Head Teacher 1 Senior Teacher 1 Community Rep/Parent
Training Length	1 week teachers, 1 day head teacher	1 week	2, one-week training workshops
Intervention Length	2 years +	20 hrs +	Indefinitely
Intervention Content	Lecture, song, poems, plays	Lecture, songs, poetry, discussion, role-plays	Lecture, discussion, role-play, ? box, essays, health club, songs etc.
Evaluate at:	2 years	1 year	6 & 18 months
Community Involvement	Parents & community consulted		Parents and community members trained

Figure 9: Comparison of PSABH and Successful Programmes

Two primary school programmes included in the earlier review appeared to be the most successful (see Figure 9). Shuey et al. (1999) evaluated a Ugandan programme that had an objective of changing sexual behaviours and Klepp et al. (1994, 1997) a programme in Tanzania with a goal of changing knowledge and attitudes. Both were able to achieve almost all project objectives. The form and content of these programmes can be used as a guideline for successful programming.

When PSABH is compared to these programmes it is evident that PSABH surpasses them in involvement of community and extent of training provided. The one characteristic where PSABH does not surpass these programmes is in involvement of a health worker. Klepp et al.'s evaluation noted that health workers were the ones who were able to communicate positively in schools about condoms (1997).

b.6 Additional Components of PSABH

PSABH goes beyond these successful programmes and includes characteristics which were among those identified in the discussion at the International Conference on AIDS as contributing to programme success:

- Peer support training
- Zonal Inspector training for monitoring
- Ongoing monitoring and support from zonal inspectors
- Multiple curricular and co-curricular components and activities
- School Health Club Activity Kit
- Initial teacher training (28 Teacher Training Colleges)
- Targeted funding to extend the reach of the programme

b.7 Uniqueness of the PSABH Monitoring, Evaluation and Research Plan

Based on this review of evaluations of school-based programmes in Africa, we can identify several unique characteristics of the PSABH MER Plan (see Appendix 3 for details of the MER plan).

First, existing evaluations have smaller survey samples conducted in fewer sites and none have conducted surveys with teachers. Sample sizes of individuals range from 72 to 2000 and sites are never over 20. We have a sample of over 7500 students and 440 teachers surveyed in 80 control and 80 target sites.

Second, where qualitative data are collected these are based on 3-4 focus groups with pupils and with teachers. In this project, in-depth qualitative work was conducted in 8 control and 8 target sites and included in-depth interviews with teachers and community leaders as well as focus groups with either 5 boys or 5 girls at each site.

Third, no other evaluations included tools such as the School and Community Responsiveness Surveys, which bring in Zonal Inspectors to monitor what is actually happening on the ground, rather than surveying what teachers claim is happening. These surveys serve both as research tools and the process of conducting them trains Zonal Inspectors systematic monitoring of programme activities.

Most interventions, like PSABH, use an action research approach, feeding the findings of the research back in to the development of the project. This makes it possible for programmes to benefit from the baseline findings.

These distinctive features of the MER plan make it possible to:

(1) Use the large sample to test natural variations such as:

- Communities with varying levels of sexual activity among the youth.
- Self-selected schools (Some schools arrived for training without invitations, often with larger numbers of teachers per school. 14 of these received training).
- Differently resourced schools.
- Variations in the gender-mix of teachers in schools. (It is hypothesized that schools with higher percentages of female teachers will take up the programme more effectively).
- Influences of different religions and religious sponsorship of schools.
- Schools that are academically at the top compared to those at the bottom.
- Urban compared to rural schools.
- Single compared to multi-ethnic schools and schools in regions where different ethnic groups dominate.
- Influence of teachers and teaching on youth behaviours.

(2) Identify and examine the processes through which behaviour occurs through the qualitative work

- How playing sex happens.
- How barriers work.
- How youth deal with competing messages.

(3) Continue to take the research findings into account in modifying the project.
For example, cycle B of training in Nyanza was planned in the light of findings from the baseline.

b.8 How PSABH Measures Up

(1) Will it impact behaviour?

- The components of PSABH more than match the best programmes evaluated in sub-Saharan Africa..
- The School and Community Responsiveness Surveys show programmes are being implemented in the schools & communities
- In the upcoming 9 month evaluation, short term gains are likely. Based on the experience of other school-based programmes, it is unlikely that these will be behaviour change.
- In the upcoming 18 month evaluation we can expect to begin to see behaviour change in pre-programme virgins.

(2) Which variations will be tested in the PSABH model will?

By March 2004, the following variations will be tested:

- an alternative mode of funding (12 month evaluation)
- 9 & 18 month evaluations of 'naturally occurring' variations in Nyanza
- 9 month evaluations for several new variations, including:
    - Having a healthworker visit schools to work with teachers and pupils and deliver a message about the role of condoms to reduce risk.
    - Training a church leader together with teachers and another community representative to see if this can result in: (1) increased consistency in prevention messages coming from the church and the school; (2) provision of information to pupils about the role of condoms in risk reduction.
    - Training 2 additional teachers to increase the number of PSABH trained teachers in schools.
- A 9 month evaluation of the peer supporter component of the programme.

Of note is that because of the short term nature of evaluation of the variations and the peer supporter component, only the most powerful variations are likely to produce detectable results.

C: What Can We Say About Cost-effectiveness?

A call for assessments of the cost-effectiveness of programmes is common. However, such assessments meet considerable difficulties. In developing a way to assess the cost-effectiveness of PSABH several issues must be taken into consideration.

Issues:

- DFID has already put its best efforts to developing a cost-effectiveness assessment, but to no avail
- No one has developed a model or measures to test CE for children this young – we do not even have much data about their sexual activities.
- We are exploring 'softer,' triangulated approaches to estimating CE. These include potential work on the reduction of HIV risk with delayed sexual debut.

In closing, I draw your attention to several points.

- The cost of the newest and what are expected to be the 'best' programmes in outcome results (e.g., Love Life in South Africa) are high. These programmes are high tech and resource and infrastructure dependent. While they may produce impressive results, they are inappropriate in low-resource settings – which describes most of sub-Saharan Africa.
- The cost of inaction has been well researched and is, uncontrovertibly, dire – including:

- Increase in HIV, orphans, gender inequity, poverty.
- Decrease in life expectancy, economic progress, political and social stability

Stover et al in the July 2002 issue of the *Lancet* use the Goals model to estimate the cost effectiveness of a comprehensive set of interventions. When making decisions about the place of school-based programming in the compendium of HIV/AIDS initiatives, it is important to recognize that it is precisely such programmes that are foundational to such cost-effectiveness modelling. What is recognized is that though, in themselves, school-based programmes may not produce the degree of impact seen in programmes targeting specific high-risk groups, these latter programmes build on the foundation set by school-based programmes. Thus, maintaining a good quality school-based programme with the capacity to adjust and modify is an essential part of reducing rates of HIV in sub-Saharan Africa. Clearly, the challenges faced in such programming must be met.

APPENDIX 1: Overview of Evaluations of School-Based Programmes in SubSaharan Africa

COMPARISON OF EVALUATIONS OF SCHOOL-BASED PROGRAMMES IN AFRICA

NOT FOR QUOTATION OR PUBLICATION (Gallant & Maticka-Tyndale, 2002)

Author	Country	Knowledge			Attitude			Other			Intention			Sexual Intercourse			Condom Use		
		Gen'l	Abst	cond use	PHAs	abst ain	condom use	Suscep	Self Eff	Close Friend	sex	cond use	Communication	ever sex	recent sex	# partn	Ever	last sex	alw. use
Knowledge Focus																			
MacLachlan, 3m	Malawi	+																	
Dalrymple, 3m	Tanzania	+																	
Knowledge, Attitudes Focus																			
Kinsman*, 3m	Uganda	0	0	0	0	0	+				0	0							
Klepp*, 6/12	Tanzania	+			+	0/+					+		+						
Kuhn, 3m	S. Africa	+	+	+	+			0				0	+						
Visser**, 3m	S. Africa	+	+	+	+		0	+			0								
Fitzgerald*, 3m	Namibia	+	+	+	+	+	+				+	+		0	0	0	0		0
Stanton*, 6/12	Namibia										0	0			+		0		
Knowledge, Attiudes, Behaviour Change Focus																			
Harvey*, 3m	S. Africa	+			+	+		+	+					0		0	+		0
Fawole, 6m	Nigeria	+	+	+	+									+		+		0	0
Shuey*, 24m	Uganda	+								+			+	+	*	+			
Bondo*		**+**	**+**	**-**	**+**	**+**	**0**	**+**	**+**		**+**		**+**						

* Primary School

** Primary & Secondary mixed (STD 6-9)

Unmarked are Secondary School

Time to evaluation: 3m=3mos or less

6m = 6 months

6/12 = 6 & 12 months

24m = 24 months

APPENDIX 2: Project Overview

Overview of Primary School Action for Better Health (PSABH)

CfBT has been managing PSABH for four years. The project is founded on the best practices developed under two earlier national programmes in Kenyan primary schools (SPRED I and PRISM[ii]). It has been implemented in 3 different sites [iii] in Kenya since 1999 and reaching a total of approximately 1,600 of Kenya's 19,000 primary schools. Currently being implemented in Nyanza Province, the purpose of the intervention is two-fold. Firstly, to bring about positive behaviour patterns in Upper Primary school pupils (11-14 year olds) that will reduce their risk of HIV infection using school-based HIV education programmes and school-community joint initiatives. Secondly, to apply a similar model throughout the primary education system.

CfBT has funds to deliver a training programme to 3 representatives (the Headteacher, a Resource Teacher and a Community Representative) of each of 1,250 schools in Nyanza Province and has provision to supply trainers and workshop materials to the remaining 2,600 schools to support their own training programmes. The training infrastructure is, therefore, larger than the initial target of 1,250 schools requires and all sensitization elements of the intervention have been delivered on a Provincial scale. The training establishment is a cascade beginning with CfBT Project Staff working in conjunction with a Lead Team of experienced trainers from MoEST, moving on to a layer of Trainers of Trainers and finally to the District Trainers who all reside in Nyanza Province.

Umbrella program:	HAPAC (HIV and AIDS Prevention and Care, phase II), Futures
Funder:	DFID (Department for International Development)
Management Agent:	C*f*BT (Centre for British Teachers)
Researchers:	University of Windsor, Canada (design, analysis, & reports) Steadman Research Group, Kenya (data collection) Zonal School Inspectors, MoEST (data collection)
Current implementation area:	Nyanza Province, Kenya (Rural area bordering Lake Victoria and including Kisumu City).
Timeframe:	Jan 2001 – March 2003
Target sites:	1,250 primary schools in Nyanza (fully-funded training by project) 200 urban primary schools in Rift Valley Province (cost-shared)
Target audience:	Upper Primary pupils (official age 12 – 14 years)
Channel:	Through existing teaching staff and community representatives, embedded within existing school system. The Headteacher, one Resource Teacher and one Community Representative from each school trained.
Trainers:	Ministry of Education, Science and Technology (MoEST) and Ministry of Health (MoH) personnel.
Training model:	2 weeks residential workshops, split by one term back in school Addressing knowledge, attitudes, values and skills
Support materials:	HIV/AIDS syllabus, MoEST "Let's Talk About AIDS" series, Kenya Institute of Education
Sustainability feature:	Trainers are full-time MoEST and MoH staff. Zonal School Inspectors (MoEST) are trained to monitor. Lecturers at Primary Teacher Training Colleges being trained.

APPENDIX 3: Monitoring, Evaluation and Research Plan

A quasi-experimental, multi-method, triangulated design is being used for monitoring, evaluation and research. A pre-post evaluation of PSABH was conducted in Bondo District Oct 1998-Oct 2000 using self-completion surveys and focus group discussions with students. A more comprehensive evaluation of PSABH began with baseline data collection in November 2001. Six month evaluation will be completed by March 2003 and 18 mos in March 2004. Schools were selected for participation in the evaluation using multi-stage stratified, disproportionate random sampling. Eighty target (received intervention) and 80-matched control (no intervention) schools were selected. Stratification was by district and academic performance. A number of schools proportionate to the number of zones were selected randomly from each district. From within this sample 8 target and 8-matched control schools were selected for in-depth qualitative data collection. These consisted of equal numbers of top and bottom academic schools (based on performance on national examinations), and an equal number with students predominantly from the Luo and the Kisii ethnic groups.

Baseline findings have been used to inform the training programme. Surveys and qualitative interviews will be replicated in October 2002 and October 2003 for 6 month and 18 month post-programme evaluations.

Summary of Research Tools

Research Tool	Respondents	# Sites	Timing	Data Collected by
PSABH I BONDO: (Oct 98 – Dec 00)				
Self-completion questionnaires	Pupils (St 6, 7 & 8) Median age: 14	24 sites	May 99/Nov 00 Pre/post	Research International
Self-completion questionnaires	Teachers	24 sites	May 99/Nov 00 Pre/post	Research International
PSABH II NYANZA: (Jan 01 – March 03)				
Self-completion questionnaires	Pupils (St. 6 & 7) Median age:	160 sites 80T, 80C	Nov 01 Pre-project	Steadman Research
Self-completion questionnaires	1 Head teacher 2 Senior teachers	160 sites 80T, 80C	Nov 01 Pre-project	Steadman Research
School In-Depth Interviews	1 Head teacher 1 Senior teacher (one resp female)	16 sites 80T, 80C	March 02 Pre-project	Steadman Research
Community In-Depth Interviews	1 Chief 1 Women Group Leader	16 sites 8T, 8C	March 02 Pre-project	Steadman Research
Focus Group Discussions	5 boys or 5 girls (13/14 years) in each site	16 sites 8T, 8C	March 02 Pre-project	Steadman Research
Pregnancy Data	Teachers, pupils, community members	160 sites 80T, 80C	March 02 Pre-project	Zonal Inspectors
(Cycle A training for research sites)	1 Head Teacher 1 Senior Teacher 1 Community Rep.	1,099 sites	APRIL 02	MoEST and MoH trainers
School Responsiveness Survey	Teachers, pupils, community members	160 sites 80T, 80C	July 02 Intermediate (3 mos)	Zonal Inspectors
Community Responsiveness Survey	Community Rep.	160 sites 80T, 80C	July 02 Intermediate (3 mos)	Zonal Inspectors
(Cycle B training for research sites)	1 Head Teacher 1 Senior Teacher	1,099 sites	August 02	MoEST and MoH trainers

	1 Community Rep.			
Self-completion questionnaires	Pupils (St. 6 & 7) Median age:	160 sites 80T, 80C	Feb 03 9 mos post	Steadman Research
Self-completion questionnaires	1 trained, 1 untrained teacher	160 sites 80T, 80C	Feb 03 9 mos post	Steadman Research
School In-Depth Interviews	1 trained, 1 untrained teacher	4 target sites	Feb 03 9 mos post	Steadman Research
Community In-Depth Interviews	Trained community representative	4 target sites	Feb 03 9 mos post	Steadman Research
Focus Group Discussions	2 FGDs, 5 boys or 5 girls (13/14 years) in each site	4 target sites	Feb 03 9 mos post	Steadman Research
Pregnancy Data	Teachers, pupils, community members	160 sites 80T, 80C	March 03 11 mos post	Zonal Inspectors
School Responsiveness Survey	Teachers, pupils, community members	160 sites	July 03 15 mos post	Zonal Inspectors
Community Responsiveness Survey	Community Rep.	160 sites	July 03 15 mos post	Zonal Inspectors
Self-completion questionnaires	Pupils (St. 6 & 7) Median age:	160 sites	Nov 03 18 mos post	Steadman Research
Self-completion questionnaires	1 trained, 1 untrained	160 sites	Nov 03 18 mos post	Steadman Research
School In-Depth Interviews	1 trained, 1 untrained teacher	4 target, 4 control sites	Nov 03 18 mos post	Steadman Research
Community In-Depth Interviews	1 Chief 1 Women Group Leader 1 trained community rep	4 target, 4 control sites	Nov 03 18 mos post	Steadman Research
Focus Group Discussions	2 FGDs, 5 boys or 5 girls (13/14 years) in each site	4 target, 4 control sites	Nov 03 18 mos post	Steadman Research
Pregnancy Data	Teachers, pupils, community members	160 sites 80T, 80C	March 04 27 mos post	Zonal Inspectors

In addition, apart from this DFID funded project, members of the University of Windsor team have conducted or are in the process of conducting:

(1) a review of the literature with particular attention paid to evaluations of school-based programmes in Africa;
(2) research on how religion affects thinking and acting about HIV/AIDS;
(3) the gendered nature of sexual scripts.

Plans are in placed to use this model of research to test several variations on the PSABH project.

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Endnotes

[i] For Kenyans, as well as for some other Africans, the term 'playing sex' means sexual intercourse. We verified this meaning through interviews with youth and adults and through consulting the research literature on sexuality in sub-Saharan Africa.

[ii] SPRED stands for Strengthening Primary Education (1992-1996) ; PRISM stands for Primary School Management (1996-2001).

[ii] Site 1: PSABH project in 247 schools in Bondo District , Nyanza Province (Oct '98 – Dec 2000). DFID funded under HAPAC.
Site 2; School and Community AIDS Prevention project in 100 schools in Nakuru Town, Rift Valley Province (Jan- Dec 2000). Funded by USAID under IMPACT.
Site 3: PSABH project in 1,250 schools in Nyanza Province (Jan '01 – March '03). DFID funded under HAPAC. This includes a further 200 self-funded primary schools in Rift Valley Province.