

PSABH COMPARED TO OTHER SSA SCHOOL-BASED PROGRAMMES

Gallant and Maticka-Tyndale (2004) in “School-based HIV prevention programmes for African youth” compared 11 evaluated school-based HIV/AIDS prevention programmes from sub-Saharan Africa for content, method and results. Five were in primary and 6 in secondary schools. The question addressed here is: *How does PSABH compare to these programmes?* Answering this question is difficult since a direct comparison between PSABH and other programmes in sub-Saharan Africa cannot be made for three reasons:

- (1) Differences in programme design, implementation and evaluation;
- (2) Extraneous and uncontrollable factors that influenced uptake of PSABH;
- (3) The presence of considerable HIV and AIDS programming in control schools.

Differences in design, implementation and evaluation between PSABH and other programmes in Sub-Saharan Africa.

There is only one programme reviewed in the Gallant and Maticka-Tyndale article that shares enough content and method with PSABH to draw a meaningful comparison. This is the Ugandan programme evaluated by Shuey et al. (1999) in which HIV/AIDS teaching and activities were infused and integrated throughout curricular and co-curricular activities. As with PSABH, there was no set time period, amount of time, or duration for the programme since it was expected to be present across the curriculum and to remain active over time. There was, however, a difference in the context of the programme and its evaluation. In all other reviewed programmes there were either:

- Specific, limited activities brought to the school (e.g., a drama production, board game, specific class); and/or,
- The programme was designed to be taught in a limited number of hours (most typically 20 hours total).

This makes all other programmes more limited in scope and easier to monitor, test and evaluate. Because PSABH and the Ugandan programme are more diffuse, they have greater potential for success in changing pupil attitudes and behaviours, but they are also:

- More difficult to implement;
- Take longer to get “up and running”; and,
- Their effect on pupil attitudes and behaviours is likely to:
 - Be more diffuse;
 - Follow indirect pathways of influence; and,
 - Take longer to evidence.

Note that the Ugandan programme was not evaluated until it was in place for 24 months.

Extraneous and Uncontrollable Factors which influenced PSABH implementation and uptake

There is no evidence of major disruptions in implementation of any of the other programmes; whereas, PSABH was disrupted by a teachers’ strike and influx of new pupils. Consider the dates below:

PSABH Training Completed	Programme in Schools	Data Collected for Evaluation
Course A – April 2002	May-July 2002 (3 mos)	SRS/CRS August 2002
Course B – August 2002	September 2002* (1 mos)	Teacher & Pupil surveys Feb** & Oct 2003
Peer Supporters – Feb 2003	February- October 2003 (8 mos)	

* Teachers on strike October – early November 2002, remainder of November disrupted with campaigning for election and ‘catch-up’ to prepare for KCPE exams.

**Average 30-40% increase in pupils in STDs 6 & 7 in January, 2003 with announcement of free primary education. No immediate increase in teachers or teaching resources.

In effect, although the October 2003 data were collected 18 months after Course A was completed and HIV and AIDS programming could be initiated in the schools, the disruptions in late 2002 and early 2003 provided considerably less than 18 months for actual programme implementation.

Extent of HIV/AIDS Programming Present in Control Schools

A lot of HIV/AIDS programming has been taking place in the control schools and in all communities served by PSABH. Kenya in 2002 and 2003, and Nyanza Province in particular, appears to be at a more advanced stage of general programming on HIV and AIDS than were the other countries where school programmes were implemented in the early to mid-1990s. As a result, there is more overlap in outcomes in target and control schools than is evident in other programmes. In PSABH, target schools are often “better” than controls, but in many cases this is by a small degree since controls have also taken steps to implement HIV/AIDS education.

What can we say about PSABH relative to these other programmes?

Recognizing the above limitations to drawing comparisons between PSABH and other school-based programmes evaluated in SSA, several tentative conclusions *can* be drawn.

Communication

All programmes that targeted and measured communication about HIV and AIDS found an increase. PSABH produced a similar increase.

Knowledge and Attitudes

There were mixed results with respect to changing knowledge and attitudes related to abstinence, condoms, and general information about HIV and AIDS in other school-based programmes. There have been no gains in knowledge scores resulting from the survey in PSABH schools. In focus groups pupils in PSABH trained schools are able to provide accurate descriptions of how HIV is transmitted and how transmission can be prevented. They are also less likely to be repeating myths about HIV than they were prior to programme implementation.

Behaviours

Sexual Debut

Two programmes produced a reduction in pupils initiating sexual activity. The Ugandan programme evaluated by Shuey et al. (1999) found a reduction when comparing sexual initiation before the programme and among pupils who had been part of the programme for 24 months. A secondary school programme in Namibia evaluated by Stanton et al. (1998) found no changes in sexual debut at the immediate and 6 month evaluations, but did find that fewer *girls* reported sexual initiation once the programme had been in place for 12 months. This was a limited, after-school programme delivered by trained (40 hours training) teachers and out-of-school youth.

For the PSABH programme, there have been more substantial gains in reducing sexual debut of boys and of girls in target than control schools. Controlling for levels of sexual debut during the year prior to PSABH, 10% fewer boys and 4% fewer girls in target than control schools report sexual debut in the year during which the programme was in place in their schools. It is important to note that there were changes in sexual debut in control as well as target schools, suggesting that the programming that is in place in all schools is having an effect, but the effect is more pronounced in PSABH trained schools.

Condoms

All but two of the programmes reviewed by Gallant and Maticka-Tyndale (2004) reported problems with teaching about condoms. In one case (Kinsman et al. 2001), the evaluators reported that the information about condoms contained in the programming worked against implementation of the programme and, consequently, the programme was actually implemented in very few of the targeted communities. In other cases, community and school resistance to including information about condoms led to these portions of the curriculum being dropped. Two programmes did include condom information. One was an after-school programme delivered by a physician and teacher(s) in secondary schools in Nigeria (mean age 17-18 years) (Fawole et al. 1999), the other was a programme that used drama to deliver and teach about HIV and AIDS (including about condoms) to STD 8 pupils in South Africa (mean age 17.6 years) (Harvey et al. 2000). Only the latter programme recorded an increase in condom use among pupils 6 months after the programme was in place.

Condoms proved to be a difficult topic in the PSABH schools. From the SRS results it was evident that teachers were struggling with what to say and consequently were relying primarily on an abstinence message. The CRS results showed that condoms were not an acceptable message in the communities either. At 6 month evaluation the struggles continued. Where information about condoms was communicated to pupils it was almost exclusively negative information designed to discourage condom use and push pupils to see abstinence as the only method to keep themselves safe. By the final evaluation the messages have shifted to become somewhat more conditional. While condoms were still described as an undesirable and inappropriate response to AIDS risk because they were porous and could let the virus slip through, they were also described as appropriate for married couples practicing contraception. In addition, some teachers reported speaking to pupils who were already sexually active and advising them that if they could not abstain

their only chance of preventing infection was to use condoms – even though condoms were not 100% effective.

While it is difficult to draw direct comparisons between PSABH and other school-based programmes in SSA, the evaluation results appear as promising as those from other programmes.

CONCLUSIONS

Perhaps the most concrete attestation to the success of PSABH is the enthusiasm of schools and zonal inspectors for the programme. This enthusiasm has been demonstrated on numerous occasions during the evaluation phase.

- Schools assigned to the control group have found ways to get their teachers trained, at times coming to training uninvited.
- Zonal inspectors who are also PSABH trainers have held their own training sessions for schools that were not part of the target group.
- Trainers, when faced with teachers and church leaders who did not attend the sessions to which they were invited, took extra steps to insure that they were able to participate in later sessions.
- When offered the possibility of training if they ‘covered the costs’ of their teachers attending, schools in Rift Valley worked with CfBT staff to creatively solve cost problems.
- So many schools attended training in Rift Valley that we had difficulty finding matched controls.

Unfortunately, for the evaluation researchers, this enthusiasm presented immense methodological challenges. Even at this point, we cannot be certain that all schools in the ‘control’ groups truly are controls, i.e., have not received training in PSABH. However, what these events tell us is that, regardless of the formal evaluation results, the PSABH programme is acceptable to schools and schools want this programme. This is an important endorsement for a programme that deals with difficult topics such as AIDS and sexuality.

All indicators from the evaluation support the conclusion that the strategies taught to teachers and peer supporters as part of PSABH have been implemented in the schools. Implementation of programme components remained high in target schools across both post-training phases of data collection, despite a drop-off in HIV programme components reported in control schools between the two post-training waves of data collection. There is also evidence that teachers have taken command of the programme and made it their own by modifying and adding to it. For example, teachers responded to information about the sexual scripts of youth and how youth felt forced to engage in sexual activity by numerous pressures, beliefs and interactions, by focusing on strategies to re-direct the scripts. Pupils took up these lessons, endorsing the strategies and repeating them back as their own during focus groups discussions. Teachers also modified the information they received in training about condoms to fit local understandings and beliefs. The majority of myths circulating among pupils and teachers prior to PSABH disappeared by the final wave of data collection. The one myth that continued was that condoms were porous and allowed the HIV virus to pass through. The persistence of this belief is not surprising since it is one that has been endorsed by a variety of authoritative sources, including the Catholic Archbishop of Nairobi. In addition, many teachers were, by October 2003, prepared to speak with youth who were sexually active and advise them that condoms were a necessary precaution against HIV – even though they were not 100% effective.

This represents a sizable shift from what was earlier being taught about condoms, i.e., that they offered no protection and, in fact, contributed to the spread of HIV.

The evaluation of the peer supporter component of the programme suggests that peer supporters make a substantial contribution. Youth respond well to the peer supporters and both teachers and pupils recognize that the conversations that peer supporters can have with pupils is different than that between teachers and pupils. Peers can, and do, speak of specific details of negotiating relationships and HIV safety. The evaluation results for peer supporters, while collected less than a year after peer supporters were trained and active in schools, already demonstrated greater gains in schools with peer supporters than those without.

Zonal inspectors have demonstrated their ability to monitor the programme and provide feedback and support to teachers. The reports of zonal inspectors on their monitoring instruments closely correlated with those of pupils and teachers collected independently through surveys and interviews. In fact, the training of teachers in control schools and the spread of PSABH lessons and strategies across schools is much to the credit of zonal inspectors.

When considering the variations on the basic PASBH model, the only one that demonstrated a clear advantage was when additional teachers were trained. Training church leaders and health workers and directing them to participate in the HIV and AIDS programming in the schools did produce greater assurance that they would visit the schools. However, it had no influence on the lessons they brought once they were in the schools. Health workers, whether or not they were trained by PSABH, were able to dispel certain myths about condoms and to provide useful and accurate advice about condoms to pupils (e.g. the ease of removing a condom from a girls' vagina if it slips off, how to keep it from slipping off, that there are good quality condoms and it is the poor quality ones that leak). But, they, as did church leaders and teachers, focused on abstinence as the only truly safe and effective way to prevent HIV transmission.

Using a combination of survey and focus group results it is clear that PSABH demonstrated clear gains for pupils. Compared to pupils in control schools, pupils in PSABH schools:

- communicated more openly about HIV and AIDS with each other, teachers, parents and other community members;
- identified the school as their primary source of quality information about HIV and AIDS;
- were independently pursuing information about HIV and AIDS;
- while their scores on formal tests of knowledge had not improved, in discussions they were able to describe how HIV was transmitted and what procedures could be used to prevent transmission or decrease risk, i.e., they were thinking critically and logically about risk and prevention;
- reported that they were able to abstain from sex and that they had learned and endorsed a variety of strategies for dealing with the pressures that pushed them to engage in sexual activity, i.e., abstinence strategies;

- were asking questions about what they saw as inconsistencies in the information they had received about condoms, i.e., that they were too porous to protect against HIV but were effective when used by adults for contraception;
- girls in particular:
 - demonstrated greater assertiveness about their own sexuality;
 - expressed less ‘need’ for either a boyfriend or for sexual activity;
 - were better able and more willing to identify situations of sexual coercion as ones where sex was the result of force rather than consent;
- fewer boys were reporting sexual activity;
- fewer boys and girls reported initiating sexual activity during the programme.

By wave 3 of data collection, i.e., 18 months after trained teachers were deployed in target schools in Nyanza, specific community and school characteristics such as the level of resourcing in a school, the number of teachers, the ethnic or religious mix of pupils or teachers, were no longer influencing implementation or pupil outcomes. This, together with the demonstrated effects of the programme lead to the conclusion that PSABH is an effective approach to providing HIV and AIDS education to primary school pupils in a variety of settings.

REFERENCES

- Gallant, M. D., & Maticka-Tyndale, E. M. (2004). School-based HIV prevention programmes for African youth. *Social Science and Medicine*, 58(7): 1337-51.
- Stover, et al. (2002). Can we reverse the HIV/AIDS pandemic with an expanded response? *Lancet*, 360: 73-77.
- School-based Programmes in sub-Saharan Africa Used for Comparative Purposes
Dalrymple, L., & duToit, M.K. (1993). The evaluation of a drama approach to AIDS education. *Educational Psychology*, 13(2), 147-154.
- Fawole, I., Asuzu, M., Oduntan, S., & Bieger, W. (1999). A school-based AIDS education programme for secondary school students in Nigeria: A review of effectiveness. *Health Education Research*, 14(5), 675-683.
- Fitzgerald, A.M., Stanton, B.F., Terreri, N., Shipena, H., Li, X., Kahihuata, J., Ricardo, I.B., Galbraith, J.S. & De Jager, A.M. (1999). Use of Western-based HIV risk-reduction interventions targeting adolescents in an African setting. *Journal of Adolescent Health*, 25(1), 52-61.
- Harvey, B., Stuart, J., & Swan, T. (2000). Evaluation of a drama-in-education programme to increase AIDS awareness in South African high schools: A randomized community intervention trial. *International Journal of STD & AIDS*, 11, 105-111.
- Kinsman, J., Harrison, S., Kengeya-Kayondo, J., Kanyesigye, E., Musoke, S., & Whitworth, J. (1999). Implementation of a comprehensive AIDS education programme for schools in Masaka District, Uganda. *AIDS Care*, 11(5), 591-601.
- Kinsman, J., Nakiyingi, J., Kamali, A., Carpenter, L., Quigley, M., Pool, R. & Whitworth, J. (2001). Evaluation of a comprehensive school-based AIDS education programme in rural Masaka, Uganda. *Health Education Research*, 16, 85-100.
- Klepp, K. I., Ndeki, S. S., Seha, A. M., Hannan, P., Lyimo, B. A., Msuya, M. H., Irema, M. N., & Schreiner, A. (1994). AIDS education for primary school children in Tanzania: An evaluation study. *AIDS*, 8, 1157-1162.
- Klepp, K.-I., Ndeki, S., Leshabari, M. T., Hannan, P. J., & Lyimo, B. A. (1997). AIDS education in Tanzania: Promoting risk reduction among primary school children. *American Journal of Public Health*, 87(12), 1931-1936.
- Kuhn, L., Steinberg, M., & Mathews, C. (1994). Participation of the school community in AIDS education: An evaluation of a high school programme in South Africa. *AIDS Care*, 6(2), 161-171.

MacLachlan, M., Chimombo, M., & Mpemba, N. (1997). AIDS education for youth through active learning: A school-based approach from Malawi. *International Journal Educational Development*, 17(1), 41-50.

Munodawafa, D., Marty, P.J., Gwede, C. (1995) Effectiveness of health instruction provided by student nurses in rural secondary schools of Zimbabwe: A feasibility study. *International Journal of Nursing Studies*, 32 (1), 27-38.

Shuey, D. A., Babishangire, B. B., Omiat, S., & Bangarukayo, H. (1999). Increased sexual abstinence among in-school adolescents as a result of school health education in Soroti district, Uganda. *Health Education Research*, 14(3), 411-419.

Stanton, B. F., Li, X., Kahihuata, J., Fitzgerald, A. M., Neumbo, S., Kanduuombe, G., Ricardo, B., Galbraith, J. S., et al. (1998). Increased protected sex and abstinence among Namibian youth following a HIV risk-reduction intervention: A randomized, longitudinal study. *AIDS*, 12, 2473-2480.

Visser, M. (1996). Evaluation of the First AIDS Kit, the AIDS and lifestyle education programme for teenagers. *South African Journal of Psychology*, 26(2), 103-113.

Previous Reports

Primary School Action for Better Health: Self-Completion Survey Pre-Programme, Volumes 1 and 2, February, 2002.

Primary School Action for Better Health: Qualitative and Quantitative Integrated Pre-Programme Report, August, 2002.

Primary School Action for Better Health: Report on School and Community Responsiveness Surveys, December, 2002.

Primary School Action for Better Health II: School and Community Responsiveness Surveys for Rift Valley,