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The provision of a health promoting environment for HIV/AIDS education: the case of Namibian senior secondary schools

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Abstract

HIV/AIDS programmes in schools ultimately intend to decrease high risk sexual behaviour. One factor facilitating this outcome is a strong health promoting environment in the school. This paper reports a study surveying the health promoting environments supporting HIV/AIDS education in Namibian senior secondary schools. It develops a two-dimensional model for classifying the strength of a school's health promoting environment. The findings show that schools have different strengths of health promoting environments linked more to their size than to a rural or urban location. The strength of a school's health promoting environment is closely related to learners' active involvement in HIV/AIDS education activities.

Keywords: School policy; HIV/AIDS education; In-service education

1. Introduction

This paper reports on aspects of HIV/AIDS education in Namibian senior secondary schools and on the strength of the health promoting environments supporting HIV/AIDS education. The study is situated in Namibia but the issues raised are not confined to that country and the findings are of significance to all education systems in developing countries working to stem the HIV/AIDS pandemic.

In a review of HIV/AIDS education initiatives Barnett et al. (1995) demonstrated the crucial importance of a strong health promoting environment in determining the impact of school health education programmes in developing countries. This paper surveys two essential elements of a school's health promoting environment: (i) the existence and implementation of appropriate school health education policies (=an organisational dimension); and (ii) the provision of appropriate professional development for teachers (=a professional dimension).

There is an HIV/AIDS crisis in Southern Africa (Whiteside and Sunter, 2000; UNAIDS, 2000). By the year 2010, life expectancy in the region is estimated to drop from close to 60 to around 40 years (Adler and Qulo, 1999). In Namibia, life expectancy has already decreased from 61 in 1991 to 51 in 1999 (GRN, 2000). The World Health Organis-

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ation (2002) estimates that 22.5% of adult Namibians are living with HIV/AIDS. This places Namibia just behind Botswana, Lesotho and Swaziland in terms of highest infection rates in Africa. Routine testing of pregnant women attending anti-natal clinics show that their infection rates in some Northern regions of Namibia run at over 40% (GRN, 2001).

1.1. HIV/AIDS education

In writing on the HIV/AIDS related knowledge, attitudes and behaviours of Namibian secondary pupils Zimba and Mostert (1993) report that learners had considerable misconceptions particularly those in the north of the country. For example almost half of the respondents in their extensive survey stated that some people are immune to AIDS and that HIV infected people always look unhealthy. They also reported that many respondents anticipated that their peers would reject them if they objected to premarital sex and that the use of condoms suggests distrust in your partner. Prompted in part by these findings and the growing number of people living with HIV/AIDS, the Namibian Ministry of Education and Culture, in partnership with NGOs, attempted to stem the spread of HIV through educational initiatives aimed at learners in secondary schools. Some of these HIV/AIDS education initiatives fall within the curriculum, for instance the inclusion of the study of sex education and sexually transmitted infections in the syllabus for Life Science (for junior secondary grades) and for IGCSE Biology (for senior secondary grades). They also introduced a Life Skills course for all grades of learners in secondary schools. Here the emphasis is on decision making, forward planning and personal and social responsibility. Extra-curricular and out-of-school activities were also encouraged.

Fitzgerald et al. (1999) report on the field-testing and adaptation of a community-based HIV/AIDS education programme for inner-city Afro-American youth (Galbraith et al., 1996) for Namibian schools. The Namibian version has been titled ‘My Future is My Choice’ (MFMC). This is co-ordinated by UNICEF and supported by other agencies such as Catholic AIDS Action. MFMC trains young people, often school learners and recent leavers, to deliver the 10-session MFMC programme to groups of about 25 young people of similar age. Apart from raising awareness of HIV/AIDS transmission and prevention, this peer-led programme aims to develop the skills involved in decision-making and in particular in negotiating sexual activity/inactivity. The venue for MFMC activities is often but not always a school. When in a school the leader is encouraged to establish a link with a member of the school staff. Fitzgerald et al. (1999) report that the Namibian intervention considerably improved participants’ knowledge and attitude with respect to HIV/AIDS and their intended condom use compared to a control group. By contrast Stanton et al. (1998) report that abstinence and reported condom use were no different for intervention and control groups. However, for the subsample of sexually inexperienced youth, significantly more of the intervention group than the control group were still virgin 1 year after the intervention. Initial sexual activity with the use of a condom was also significantly higher in the intervention group than the control group. In her study of the impact of HIV/AIDS education programmes in the country Ndjoze-Ojo (2001) also records the positive outcomes of MFMC. From her survey of 500 learners and 61 HIV/AIDS education programme implementers she reports that the MFMC programme not only reduced adolescent sexual risk behaviour but also created a demand for similar training programmes for younger learners. While the Life Skills curriculum was seen to be well tailored to prepare learners with positive attitudes to deal with HIV/AIDS problems, she was clear that it was the MFMC programme that had greatest impact on behaviour. There is thus some evidence of the effectiveness of this major extra-curricular HIV/AIDS education project.

In order to facilitate behavioural change through school-based HIV/AIDS education interventions, Barnett et al. (1995) see a strong health promoting school environment as a pre-condition. We recognise two key dimensions to such a school environment. The first is organisational and the second is professional. With regard to the organisational dimension we identify four contributing elements. These are:

(i) the existence and implementation of a school health policy document;
(ii) in addition to the incorporation of HIV/AIDS education into the core curriculum, the provision by the school of opportunities for extra-curricular health related activities;
(iii) the provision of school-based sexual health care; and
(iv) school–community links.

In considering these dimensions we need to keep in mind the age and experience profile of the learners in secondary school. It would not be unusual for a grade 11 class in the first year of a two-year IGCSE course to have learners between the ages of 15 and 25, for the majority to be sexually active and for several to be parents.

1.2. The organisational dimension

1.2.1. The implementation of a school health policy document

School-based HIV/AIDS education is strengthened through the existence and implementation of a whole-school health policy document. Such a document needs to set out clearly the school commitment to HIV/AIDS education, how this will be met and by whom. It also needs to include how the schools will respond to learners and staff with HIV/AIDS and to those members of the school community who have family living with HIV/AIDS. Thus, such policy documents should not be restricted to the need to communicate facts about HIV/AIDS, the transmission of the virus and behaviours that reduce the risk of infection but also include ways of relating to and supporting people with HIV/AIDS (for example see Gilks, 1998). They should also include statements related to dealing with allegations of rape, sexual assault and sexual harassment by fellow students and staff (Human Rights Watch, 2001). Such documents can make clear the aims and objectives, roles and responsibilities for HIV/AIDS education and how these can be met. They form a solid foundation for successful HIV/AIDS education.

1.2.2. The provision of opportunities for extra-curricular health related activities

Outside the compulsory curriculum Fawole et al. (1999) report on an intervention of a series of weekly after-school extra-curricular sessions with volunteer teachers and public health practitioners using films, role-plays, debates and story telling. They claim that such a programme improves knowledge and attitude on HIV/AIDS. It also significantly changes sexual behaviour in terms of condom use and reduced number of sexual partners as compared to sexual behaviour in members of a control group. Similarly, the establishment of extra-curricular school AIDS awareness clubs, run by concerned students and sympathetic teachers have resulted in comparable achievements (Stephenson et al., 1998; Fitzgerald et al., 1999). Extra-curricular interactive drama performances by peers have been shown to be particularly effective in changing learners' attitudes to people with HIV/AIDS (Harvey et al., 2000). School-organised extra-curricular activities are an important force in HIV/AIDS education.

1.2.3. School-based sexual health care

The provision of school-based sexual health care, particularly through the provision of advice on contraception and sexually transmitted infections (STIs) and access to condoms is a more controversial element of a school's health promoting environment. Despite evidence to indicate that many school learners are sexually active in their very early teens (Feldman et al., 1997), direct access to condoms in school has met with serious reservations from parents in several countries in Southern Africa (GRN, 1999; Swaziland MoE, 1999) but less so from teachers (Adeyemi and Tabulawa, 1993). The Government of Namibia distributes free condoms through the public health services (Shiimi, 2001) and condoms are sold at minimum costs through the Social Marketing Association. Conversations with school Principals in Namibia indicate that they are divided on their views of a government plan to make condoms available in schools but there is evidence that teachers inform learners of the sources of condoms (Oei, 2001). HIV/AID education programmes tend to stress abstinence from sexual intercourse (=safe

sex) and if this advice cannot or will not be followed then they advocate the use of condoms (=safer sex) (Catholic AIDS Action, 2000).

1.2.4. School–community links

Link between a school and the community it serves, including learners' parents and family members, on HIV/AIDS education is a powerful component of a school's health promoting environment. As an illustration, Kuhn et al. (1994) report on an attempt to involve learners, teachers and parents in the development of a school-based HIV/AIDS programme. The repercussions of this programme included a persistent rumour in the wider (urban) community that HIV was spreading in the school. The authors suggest that lack of involvement of community leaders in the development of the HIV/AIDS initiative contributed to such a negative response. In contrast, Killewo et al. (1997) and Feldman et al. (1997) used community ward meetings to survey common sexual behaviour and perceptions about HIV. Resulting suggestions for interventions were then used to shape HIV/AIDS initiatives, for in-school youth and school leavers. Education of the community (often helped by the school learners) can help to support and consolidate knowledge and understanding and extend the spread of information. This is an aspect of HIV/AIDS education that seems to be unreported and thus possibly underdeveloped in Southern Africa.

1.3. The professional dimension

Barnett et al. (1995) identify the nature of INSET programmes for providers of HIV/AIDS education as another major factor influencing behavioural change in young people. There are three elements of HIV/AIDS teacher education programmes that are required to help teachers to contribute to a strong health promoting school environment. These are:

(i) the teaching and learning of the HIV/AIDS content knowledge required by teachers;
(ii) the provision of appropriate learning and teaching methods for use by the teachers and their learners;
(iii) the cultivation of teachers' willingness and ability to take responsibility for HIV/AIDS education.

This is in accord with Monk's (1999) findings that effective INSET provision needs to take account of and help teachers integrate the three aspects of their professional content knowledge (Shulman, 1987). That is, firstly, gaps in teachers' *subject knowledge* (e.g. What is HIV/AIDS? How does it affect us? How can we stop its transmission?), secondly, teachers' *pedagogy* (The role of the teacher in the classroom. The teaching and learning methods to be used. The learning materials to be employed.) and thirdly, the *contextual knowledge* of the learner and the learning environment (The characteristics of the learners. The factors promoting and constraining learning.). In addition, Baggaley et al. (1999) clearly illustrate that teachers' decisions about contributing to HIV/AIDS education depend on a range of different factors apart from subject knowledge, such as the demands of a new role for the teacher as a counsellor, the increased awareness of disrupted family relationships due to HIV/AIDS and the culturally or religiously motivated reservations of learners, their parents, colleagues and perhaps themselves. INSET needs to deal with such factors and support teachers to make a positive contribution to HIV/AIDS education.

1.4. Aims of the study

This paper reports on the existing health promoting environment for HIV/AIDS education in Namibian senior secondary schools and the range of HIV/AIDS education activities taking place. The following research questions have been addressed:

(i) What is the organisational dimension of the health promoting environment related to HIV/AIDS education in Namibian senior secondary schools?
(ii) What is the professional dimension of the health promoting environment related to HIV/AIDS in these schools?
(iii) How does the health promoting environment for HIV/AIDS education vary in different

regions, rural/urban locations, school size and controlling agency?

(iv) What are typical HIV/AIDS education activities?

(v) How do schools' HIV/AIDS education activities relate to their health promoting environment?

The importance of this work for education in Namibia is seen as twofold. Firstly, it presents an appraisal of school-based HIV/AIDS education in the country. Secondly, and equally importantly, it provides suggested action points for teacher preparation and policy development contributing to the likely effectiveness of current HIV/AIDS interventions. This is seen to be a timely outcome as the Namibian Ministry of Basic Education, Sports and Culture (MBESC) has initiated a study of the impact of HIV/AIDS on the education sector, designated a senior member of MBESC staff as coordinator of HIV/AIDS activities and established HIV/AIDS committees in the regional offices. In addition, the work is seen as informing the practice of other nations and offering pointers and comparisons for other countries that are challenged with the essential need to provide successful HIV/AIDS education.

2. Methods

In this survey study, 94 teachers on an INSET course collected data on HIV/AIDS education policies and practices as an assessed task for their professional development programme. Data were collected from 42 schools in which the teachers were based for an experiential placement. This sample represents just under half of all senior secondary schools in the country. The geographical spread of schools is representative of the distribution of senior secondary schools in the country but with some under-representation of schools in regions in the south and centre of the country (Keetmanshoop and Windhoek). Structured interviews with general, but factual, questions were conducted with the school Principal or the staff member responsible for HIV/AIDS education. Where considered necessary this information was supplemented by interviews with other members of staff. Responses were entered on pre-printed response forms, containing large free-writing spaces. Occasionally, additional documentary data were collected.

Schools were grouped according to their educational region, controlling agency (government, grant-aided, private) and size. For the latter, enrolment figures were used to allocate schools in bands of 250 learners. Local knowledge was used to classify schools as urban, peri-urban or rural.

For 70% of the schools, data were collected by two or more teachers placed in the same school so providing an opportunity for data triangulation. Such multiple-source data were generally independent but consistent, thus increasing the reliability. In some cases, teacher–teacher collaboration was apparent. Profiles were constructed for the organisational and professional dimensions of each school's health promoting environment structured according to the elements of each as described above: four elements for the organisational dimension and three for the professional dimension. Types of HIV/AIDS educational activities were clustered across schools according to similarity and an activity typology for each school was developed. These typologies were constructed by both authors independently and then compared. Differences were discussed and agreement reached, thus increasing the validity of the typology.

In cases where multiple data sources were available for one school, these were treated as supplementary information. Only in 10% of the schools was multiple-source data clearly conflicting, e.g. where one respondent stated that nobody had responsibility for HIV/AIDS education while another named a staff member with this responsibility; or where one respondent stated that no activities took place while another listed specific activities for the same school. In these cases the richer information was included in the school profile. For each school, combinations of features of the organisational and professional dimensions of a health promoting environment and reported HIV/AIDS education activities were identified. Patterns were then identified from the frequencies of recurring combinations.

3. Findings

3.1. The organisational dimension of health promoting environments

Around 75% of schools were reported to have no policy document for HIV/AIDS education or even for health education. Of those schools with policies few details were made available to the data collectors. For one school the policy was 'an adaptation of the general HIV/AIDS policy' (school 20) and in another 'the same as the Life Skills guidelines' (school 5). Only 10% of the schools reported the existence of a written health education policy document. One such school had a comprehensive 'Health Charter' explicitly covering 'the provision of safe and clean eating and drinking places; check that learners are dressed properly and are clean; creation of awareness of social issues amongst learners like AIDS, child abuse, sexual harassment, drugs and alcohol misuse' (school 8).

The data show that 28% of schools had no teacher designated as responsible for HIV/AIDS education. However, some pressure to improve this situation exists as shown by the response from school 14: 'the Principal got the message from the regional circuit office to appoint teachers and some of the learners to establish a club on HIV/AIDS'. In 61% of schools a single teacher was responsible for HIV/AIDS education. These were equally likely to be a female or male member of staff. In only 10% of the schools was responsibility shared between a male and a female teacher. The vast majority of HIV/AIDS education co-ordinators were ordinary classroom teachers and only occasionally were they Heads-of-Department or school administrators.

Only two schools (5%) mentioned provision of sexual health care in terms of condom availability. In one of these cases, condoms were distributed after an AIDS awareness campaign organised by the Regional Education Office, indicating that they are not necessarily available on a regular basis (school 24). Several schools reported inviting speakers from local hospitals or clinics to talk about HIV/AIDS, but we do not regard such occasional contact a provision of sexual health care. Only two schools were reported to specifically foster school–community links as part of the HIV/AIDS education policies. Table 1 presents the frequencies of schools with combinations of the four elements of the organisational dimension of a health promoting environment.

Table 1 shows that the organisation of one in five schools does not provide any aspects of a health promoting environment as defined above. The health promoting environment in just over half of schools is supported only by designating a staff member as an HIV/AIDS co-ordinator, responsible for planning structured extra-curricular HIV/AIDS education activities. One in seven schools combined this provision with the implementation of a school health policy document. This combination was matched with access to relevant sexual health services or efforts in building health-supporting school–community links in only one in 20 schools.

Table 1
Frequencies of categories of the organisational dimension of schools' health promoting environment ($n = 42$)

Category	Characteristics of school's health education policies	Number of schools (%)
A1	None of the required aspects in place	9 (21)
B1	Provision for planned extra-curricular activities only (designated HIV/AIDS co-ordinator)	22 (52)
C1	Provision for planned extra-curricular activities and with a school health policy document in place	6 (14)
D1	Provision for planned extra-curricular activities or a school health policy document in place, plus access to sexual health services (condom distribution)	2 (5)
E1	Provision for planned extra-curricular activities or a school health policy document in place, plus school–community links	2 (5)
F1	Unclassifiable	1 (2)
	Total	42

3.2. The professional dimension of health promoting environments

Appropriate INSET for HIV/AIDS education is the second major factor influencing a health promoting environment for HIV/AIDS education in schools. The data show that only in about 60% of the schools had any members of staff been trained for HIV/AIDS education. In almost all of these schools less than one in four members of staff undertook such INSET. However, in two schools more than half of their staff had undergone HIV/AIDS education training. It is noted that in several cases the HIV/AIDS education co-ordinator had no training. For those teachers who had undertaken HIV/AIDS education training the data reported on course content have been analysed for attention to subject knowledge, pedagogy and knowledge of the learning environment, respectively.

All the INSET courses for HIV/AIDS education were reported as having dealt with subject knowledge, such as 'the difference between HIV and AIDS, mother to child transmission, prevention of spreading HIV' (school 35) or 'sex education, teenage pregnancies, STDs' (school 20). Staff at eight schools undertook INSET focussing on teaching methods for HIV/AIDS education such as 'ways of teaching HIV/AIDS to learners through debates' (school 10) and 'HIV/AIDS teaching through dramas' (school 41). Staff at 12 schools undertook INSET focussing on teachers' responsibilities for the dealing with HIV/AIDS in the school environment, such as 'counselling learners' (school 1), 'ways and means of dealing with rejection of HIV infected people' (school 29) and 'to assist learners to cope with those affected (self, family members or friends)' (school 9). Table 2 presents the frequencies of schools with staff who had undertaken HIV/AIDS education INSET dealing with the three aspects of professional content knowledge, thus reflecting the professional dimension of the schools' health promoting environment.

Table 2 shows that the HIV/AIDS education INSET undertaken focused on only content knowledge of HIV/AIDS (in one in six of the schools), combined with teaching methods (one in eight schools) or combined with counselling skills (one in five schools). Only rarely (not even one in 10 schools) were these three essential aspects combined.

3.3. Schools' health promoting environments for HIV/AIDS education

Since the descriptors and categories for the organisational dimension (see Table 1) and professional dimension (see Table 2) of a school's health promoting environment are each ranked to indicate a level of provision, a combination of the categories of both dimensions describes the extent of a school's health promoting environment for HIV/AIDS education. Table 3 presents the frequencies of schools with various categories of organisational and professional dimensions of a health promoting environment. The categories used in Tables 1 and 2 provide the descriptors of each.

The greatest frequencies in Table 3 tend towards the diagonal, showing that the organisational and professional dimensions are related features of a health promoting environment for HIV/AIDS education in schools. Using the information in Table 3, the following levels of provision of a health promoting environment can be derived.

Level 0	No provision (A2 + A1 combination)	$n = 7$ (17%)
Level 1	Basic provision (A2 + B1, B2 + A1, B2 + B1 combinations)	$n = 14$ (33%)
Level 2	Intermediate provision (B2 + C1, C2/D2 + B1, C2/D2 + C1 combinations)	$n = 13$ (31%)
Level 3	Advanced provision (C2/D2 + D1/E1, E2 + C1, E2 + D1/E1 combinations)	$n = 3$ (7%)
Unclassifiable (all others)		$n = 5$ (12%)

The few schools unable to be classified had an imbalanced provision combining a high level of professional preparation and a low level of school organisation or vice versa.

Table 2
Frequencies of categories of the professional dimension of schools' health promoting environments ($n = 42$)

Category	Characteristics of INSET	Number of schools (%)
A2	No INSET	18 (43)
B2	INSET focuses on subject knowledge of HIV/AIDS only	7 (17)
C2	INSET focuses on subject knowledge of HIV/AIDS and on teaching methods	5 (12)
D2	INSET focuses an subject knowledge of HIV/AIDS and on counselling	9 (21)
E2	INSET focuses on subject knowledge of HIV/AIDS, teaching methods and counselling	3 (7)
	Total	42

Table 3
Frequencies of schools' health promoting environment for HIV/AIDS education

Professional dimension	Organisational dimension					
	A1: none	B1: structured extra-curricular activities	C1: structured extra-curricular activities + policy document	D1/E1: structured extra-curricular activities + policy document + school–community links or access to sexual health services	F1: unclassifiable	Total
A2: none	7	9	–	1	1	18
B2: subject knowledge only	–	5	2	–	–	7
C2/D2: subject knowledge + pedagogy or counselling	2	7	4	1	–	14
E2: subject knowledge + pedagogy + counselling	–	1	–	2	–	3
Total	9	22	6	4	1	42

The list above shows that seven schools (17%) surveyed lacked a health promoting environment to support HIV/AIDS education while only three (about 7%) have a comprehensive support structure in place.

3.3.1. The health promoting environments of schools in relation to location, size and controlling agency

The data include only one private school and one grant-aided school. All other schools are government controlled. Analysis for differences in the health promoting environments according to controlling agencies has therefore not been pursued. The three other variables are explored, i.e. school location (rural, peri-urban or urban), educational region and size (according to the enrolment figures). Table 4 shows the frequencies of different levels of the schools' health promoting environments for each of these variables. For each subgroup of schools a weighted mean has been calculated as an indicator of the average level of health promoting environment.

Table 4 shows that, on average, the level of health promoting environment did not differ according to a school's location in a rural, peri-urban or urban environment. However, the level of provision was more varied in rural and peri-urban areas than in urban areas. Table 4 also shows that there was considerable variation according to edu-

Table 4
Levels of schools' health promoting environment for HIV/AIDS education in relation to school location, region and size (n = 42)

School descriptor	Frequency of level of health promoting environment for HIV/AIDS education						Total
	Level 0	Level 1	Level 2	Level 3	u[a]	Average level	
Location							
– Rural	2	2	4	1	3	1.3	12
– Peri-urban	3	1	3	2	–	1.3	9
– Urban	2	11	6	–	2	1.2	21
Total	7	14	13	3	5	1.3	42
Region							
– Katima Mulilo	–	–	4	–	–	2.0	4
– Keetmanshoop	–	1	1	–	–	1.5	2
– Khorixas	–	1	2	2	1	2.2	6
– Ondangwa-East	1	2	1	1	–	1.4	5
– Ondangwa-West	3	1	3	–	3	1.0	10
– Rundu	3	1	1	–	1	0.6	6
– Windhoek	–	8	1	–	–	1.1	9
Total	7	14	13	3	5	1.3	42
School size							
– Small (<501 learners)	1	–	4	2	2	2.0	9
– Medium (501–750 learners)	4	5	6	1	2	1.4	18
– Large (751–1000 learners)	1	5	3	–	1	1.2	10
– Huge (>1000 learners)	1	4	–	–	–	0.8	5
Total	7	14	13	3	5	1.3	42

[a] u = unclassifiable.

cational region. The health promoting environment was good in schools in Katima Mulilo and Khorixas regions. It was average in Ondangwa-East and Keetmanshoop, and distinctly below average in Ondangwa-West, Windhoek and particularly in Rundu. This low level in Rundu and Ondangwa-West is heavily influenced by the large proportion of schools with no staff member trained in HIV/AIDS education and with no staff member designated to co-ordinating extra-curricular HIV/AIDS education activities (four of six, and six of 10 schools for the respective regions). In Windhoek the main reason for the low provision is the lack of training for HIV/AIDS education of any staff at more than half of the schools. The size of school was also directly related to the level of its health promoting environment. On average, small schools rate highly whereas the very large schools consistently show a low level of health promoting environment.

3.4. HIV/AIDS education activities within the curriculum

The school reports indicate that HIV/AIDS education either fell within the school curriculum or formed an extra-curricular activity. Table 5 shows which school subjects incorporated HIV/AIDS education.

In line with syllabus requirements, virtually all schools reported including HIV/AIDS education in Life Science at junior secondary level and Biology at senior secondary level. Three out of four schools included HIV/AIDS education in Life Skills. No pattern emerged for schools that did not mention such inclusion. Some schools also include

Table 5
Frequencies of inclusion of HIV/AIDS education in school subjects ($n = 42$)

Rank	School subject	Frequency of inclusion of HIV/AIDS topics (%)
1	Biology/Life Science	40 (95)
2	Life Skills	32 (76)
3	Geography/Development Studies	7 (17)
4	Languages (English/Afrikaans)	6 (14)
5	Mathematics	3 (7)
6	Religious and Moral Education	1 (2)
	No response	1 (2)

HIV/AIDS education as a topic in Geography or Development Studies, Languages or Mathematics. Again, no pattern for such inclusion has emerged. Schools cannot be differentiated according to the ways in which they integrate HIV/AIDS education into the curriculum. Decisions seem to be unique to individual schools and may well depend on the wishes of the Principal, the availability of resources and the willingness of staff.

3.4.1. Extra-curricular HIV/AIDS education activities

Respondents were asked to describe recent/current and planned extra-curricular activities for HIV/AIDS education within their school. Two issues are important to the comparability of these data. Firstly, several respondents mention names of projects, programmes and NGOs as shorthand for activities. In most cases we have sufficient supportive evidence to infer confidently what has been done or is being planned. For instance, a reference to the UNESCO project and to *My Future is My Choice* can be translated into regular visits (once or twice a week) of a trained outside HIV/AIDS education co-ordinator from the Ministry of Youth and Sport (school 21). References to visits of the Social Marketing Association equate with group activities for volunteer members of an AIDS Action Club to prepare campaigns, and usually provide access to a condom supply. A mention of 'a VSO visit' would typically be an address to the whole school or year groups by outside speakers including an HIV infected person. Red Cross activities refer to HIV/AIDS related puppet shows for large groups of learners. However, teachers used some other labels for which it was harder to infer specific activities. It is unclear what the precise activities are of the 'Girl Child' programme or of the Teenagers Against Drugs and Alcohol (TADA) groups. Similarly, we have no detail on what is involved in the HIV/AIDS related initiatives by the National Youth Council or US Peace Corps. It may be that teachers are not involved directly in such activities or are merely passive participants. The second issue related to the cross-school comparison of the data results from the fact that it was impractical to specify a time period for the listed HIV/AIDS education activities.

With the above issues in mind, the extra-curricular activities described have been grouped according to the degree of learner ownership as follows:

1. learners passive: activities where learners are recipients with an opportunity to respond to outside input;
2. learners active internally: activities where learners work together on improving their own understanding, attitude and behaviour;
3. learners active externally: activities where learners use their own improved understanding, attitude and behaviour to influence other members of the community.

Table 6 presents the frequencies of schools with each of the above types of activity. For some schools more than one type of activity was reported so that the total activity frequency exceeds the total number of schools.

Table 6 shows that for about a quarter of the schools no extra-curricular HIV/AIDS education activities were reported. In more than half of the schools a visiting speaker, typically a medical expert or a social worker, addressed the learners. Also in about half the schools the learners worked collaboratively in after-school clubs to improve their knowledge, attitude and behaviour. In about a quarter of the schools learners were reported to be involved in communicating their knowledge and attitudes regarding HIV/AIDS to other members of

Table 6
Frequencies of provision of extra-curricular HIV/AIDS education activities

Type of activity	Frequency of schools with activity	
	Ongoing	Planned
No activity	9	10
Learners passive: Total	23	15
∗ Address by medic or social worker	12	10
∗ Address by HIV infected person	5	1
∗ Show: puppet/drama/video	7	3
∗ Circulation of leaflets	2	–
Learners active (internally): Total	23	13
∗ Participation in peer-led club/committee	19	10
∗ Collaborate for own learning	9	5
∗ Collaborate to collect information	2	3
∗ Collaborate for counselling each other	1	1
∗ Attending peer leader training	5	3
Learners active (externally): Total	10	13
∗ Perform HIV/AIDS drama/debate	7	7
∗ Participate in HIV/AIDS based competitions/fairs	3	3
∗ Disseminate HIV/AIDS information through print	2	3
∗ Organise special public HIV/AIDS event	2	3
∗ Participate in community education about HIV/AIDS	2	3
∗ Twinning of schools	1	1
Unknown	3	4

the community, inside or outside the school. It is interesting that since 1999 one of the regions has organised an annual school competition and awards prizes to Health Promoting Schools (school 12). The same region encourages school twinning with the aim of health promotion. Table 6 also shows that activities planned for the future are less diverse than ongoing activities. However a larger proportion of the planned activities fall into Category 3, i.e. where the learner is involved in community-based activities.

3.5. Relationship between health promoting environment and extra-curricular activities

Each school has been rated according to the highest category of extra-curricular activity it has provided or planned for (0, 1, 2 or 3 in the classification above). Schools with activities requiring a high degree of learner ownership are rated higher than those with activities requiring less learner ownership. Subsequently, for each school the rating of extra-curricular activities has been related to the level of its health promoting environment for HIV/AIDS education. Table 7 shows how these ratings match.

It is not surprising that Table 7 shows that four schools with no health promoting environment report no extra-curricular activities. Neither is it remarkable that three schools with a high level of health promoting environment for HIV/AIDS education also have highly rated extra-curricular activities. More interesting are the three schools that do not provide a health promoting environment yet report HIV/AIDS education activities. Further analysis of the data shows that although these schools have no staff member responsible for HIV/AIDS education, activities are initiated from outside the school, either by NGOs or government officials. All of these activities are reported as

Table 7
Schools' health promoting environment and level of extra-curricular HIV/AIDS education activities

Type of activities	Frequency of levels of health promoting environmentfor HIV/AIDS education					Total
	Level 0	Level 1	Level 2	Level 3	u[a]	
0: no activity	4	3	–	–	2	9
1: learners passive	2	3	1	–	2	8
2: learners active (internally)	1	4	6	1	1	13
3: learners active (externally)	–	4	4	2	–	10
U: unclassifiable	–	–	2	–	–	2
Total	7	14	13	3	5	42

[a] u = unclassifiable.

'addressing the learners'. Two schools report inputs from VSO workers accompanied by people living with HIV and the other an address by an officer from a government ministry.

Another cluster of four schools in Table 7 have a basic health promoting environment but report the highest rated extra-curricular learner activities. These schools all seem to benefit from having regular visits from outsiders to teach the '*My Future is My Choice'* programme. Here, it may be the case that the MFMC programme merely uses the school premises and has little official connection with the schools other than permission to use the facilities. These schools also have only one teacher in charge of HIV/AIDS education: schools with a similar basic provision but with two teachers in charge of HIV/AIDS education report more lowly rated extra-curricular activities. Another rating booster to extra-curricular activities is the existence of an Aids Awareness Campaign Club. One school reported that members of the club 'performed drama and read poems about HIV/AIDS to the school' (school 21) and 'did a drama competition at Rundu College and got 1st prize' (school 32). Thus, the lack of training or the appointment of a designated HIV/AIDS education co-ordinator does not necessarily appear to be a major obstacle to HIV/AIDS education activities. The intervention of an external agency and/or the initiative and drive of an individual teacher or group of learners must not be underestimated.

4. Discussion and implications

Namibia, like many countries in Africa is trying to grapple with the HIV/AIDS crisis and views education as the key to the protection of its citizens. There is much to do. This study identifies a system-wide lack of school health policy documents and school–community health education links. If HIV/AIDS education is to result in low-risk sexual behaviour of Namibian youth then there is an urgent need for action in these areas. As highlighted by the Presidential Commission (GRN, 1999), sexual harassment and even rape of schoolgirls on school premises are not uncommon events and workable policies and practices to prevent such actions need to be developed and implemented as a matter of urgency. Awareness of HIV/AIDS within Namibia is now widespread providing a sound basis for school–community health education links. It is thus reassuring that our data show that learners' extra-curricular activities include actions aimed at community audiences.

Where teachers have undertaken training for HIV/AIDS education, these programmes have mostly been unbalanced. Many programmes focused only on knowledge about HIV/AIDS and the mechanisms of preventing transmission. Several INSET programmes combined the improvement of teachers' knowledge with an introduction to appropriate teaching methods or with counselling skills. However, HIV/AIDS education

INSET programmes should deal with all three aspects through integrated professional development activities such as case studies and role-plays that encourage teachers to develop skills as well as knowledge and understanding. Only in this way can meaningful and usable professional content knowledge be developed. If not, even teachers with good intentions will deal with HIV/AIDS as if it were an examination topic and not play a part in education for low-risk sexual behaviour (Baggaley et al., 1999).

The overall data show a similar health promoting environment in rural, peri-urban and urban schools. This surprising finding may be related to the high mobility of Namibians resulting from the recent liberation war and the subsequent job opportunities after independence. This socio-economic factor may have made views on providing HIV/AIDS education independent from schools' location. Differences in the levels of health promoting environment for schools in the various educational regions are mainly due to the absence/presence of designated HIV/AIDS co-ordinators in schools and of the coverage of HIV/AIDS in teacher training programmes. These regional differences do not reflect the prevalence of HIV/AIDS in these communities (GRN, 2001). Ondangwa-West and Windhoek have a high incidence of HIV/AIDS but their schools only have a basic health promoting environment for HIV/AIDS education. The high level of provision in Katima Mulilo and Ondangwa-East (with an equally high incidence of HIV/AIDS) may be explained by the longer established MFMC programme which was introduced into the regions' schools in 1997. Imaginative initiatives are being undertaken in Khorixas Region. AIDS Awareness Clubs have incorporated objectives on drugs and alcohol usage. Marches of school youth through towns are organised culminating in students' public drama sessions and speeches in market areas. Schools are encouraged to identify HIV/AIDS awareness partner schools for exchange of information on strategies. Schools are challenged to structure HIV/AIDS education programmes to compete for Bronze, Silver and Gold medals. These initiatives may serve as a model for the other regions, and lead-teachers from Khorixas could form a core of INSET providers.

One of the limitations of this study is that it was not designed to provide any indication of the effectiveness of activities in terms of behavioural change. Our analysis is based on the nature of activities leading to increased ownership and learner empowerment. We contend that empowered learners who have participated in active HIV/AIDS learning are more likely to adopt desirable behaviours than those who have been a passive audience for a presenter.

The low level of health promoting environments for HIV/AIDS education in very large schools is disconcerting. No ready explanation can be offered. A further study needs to be undertaken into the characteristics of large schools that facilitate and hamper a strong health promoting environment, and the consequent provision of HIV/AIDS education.

Our study has focused on the situation in Namibia and demonstrated the need to encourage the establishment of stronger health promoting environments in senior secondary schools. However, the message that it is important to have and implement school policies for HIV/AIDS education, to appoint a trained person to co-ordinate HIV/AIDS education across the curriculum and through extra-curricular activities and to provide appropriate and comprehensive professional development for teachers, needs to be recognised by other countries seeking to better their schools' provision for HIV/AIDS education.

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