AIDS education in schools — awareness, attitudes and opinions among educators, theology students and health professionals

C. P. JAMESON, P. H. GLOVER

Abstract **A project was undertaken in Grahamstown to assess the level of AIDS awareness, attitudes towards AIDS and opinions as to how and whether education programmes for schoolchildren should be planned. Opinions were canvassed initially by means of a questionnaire to three groups of professionals who could become involved in AIDS education programmes: student teachers and lecturers in the Department of Education at Rhodes University, theology students at the local Theological College and health care professionals at Settlers' Hospital. Each group was then asked to attend a lecture about AIDS at which slides were shown of actual cases of the disease and its complications. A slightly modified version of the original questionnaire was then administered after 6 weeks to assess any changes in awareness, attitudes and opinions. The study did not attempt to establish the permanence of any such changes.**

S Afr Med J 1993; **83:** 675-679.

AIDS education programmes have to overcome a number of obstacles: (*i*) the belief held by many that 'it cannot happen to me'; (*ii*) resistance to change in patterns of behaviour;[1,2] (*iii*) the difficulties of reaching (both literally and figuratively) the target audience;[3] and, worst of all, (*iv*) the fact that there is so little time.[4,5]

It is becoming increasingly evident that for AIDS education programmes to be effective, they must have schools as their locus and schoolchildren as their focus.[6,7] One way of approaching this problem would be to educate teachers so that they could educate pupils continually and as a matter of course, rather than send health educators into schools on an *ad hoc* basis. Pupils might be more responsive to someone they already knew and trusted. Besides this, teachers are trained in teaching skills which health educators might lack. A programme to educate and involve teachers would be more cost-effective than the employment of a cadre of itinerant health educators to educate pupils individually or in small groups (although such programmes can be valuable). A teacher involvement model acknowledges that AIDS education must be multi-faceted, providing factual information, encouraging appropriate general and specific behaviour patterns and fostering appropriate attitudes. Teachers may need to be convinced that if effective AIDS education is holistic and therefore an essential part of general education, the proper place for it is in the hands of the classroom teacher. The principle behind this approach may already be in place given that a required component of 'general teacher' training is pupil guidance and counselling.[8] But this is a sensitive issue and mere official force is unlikely to solve the problem. This study suggests some potential solutions which can be incorporated into effective AIDS education models.

A survey was carried out in Grahamstown between April and November, 1991. The objectives of the study were to evaluate by means of a questionnaire current awareness, attitudes and opinions among samples of student teachers, their lecturers, theology students and nursing and medical staff. They were given a formal lecture which was both comprehensive and frank and then presented with ample opportunity to ask questions. Their basic knowledge, attitudes and opinions were re-evaluated after a minimum of 6 weeks to ascertain the durability of the lecture information and to minimise the effect of the lecturer's perceived attitudes. Ideally a longer delay would have been preferable. However for practical reasons this was not possible, besides which there was no way of controlling for the possibility that influences other than the lecture would become more significant if there were a longer delay.

The questionnaire addressed the following: (*i*) level of informedness and awareness about the condition; (*ii*) reported attitudes to the condition; (*iii*) opinions about the role of the teacher or health educator in education; (*iv*) how an AIDS programme should be implemented in the classroom; and (*v*) whether by way of formal education programmes during school or after classroom hours. Participants were also asked whether: (*i*) pupils would react better to people they knew than to outsiders; (*ii*) how the parents should be involved; and (*iii*) their opinions on the future of AIDS and the problems that they foresaw.

Subjects and methods

The subjects were divided into 5 groups: student teachers, their lecturers, theology students, practising teachers and health care professionals. Each group comprised people of all race groups with ages ranging from 18 to 50 years. More than half of all participants were parents. Information on each group is given in Table I. The health care professionals included untrained staff, staff nurses, nursing sisters and doctors. The theology students were mature students, many of them married with children.

The lecture included details about the history of the condition, the cause of the disease and the clinical pattern and complications that might occur. Mention was made of the fact that at present there was no cure and no cure could be expected in the near future. The factual content of the lecture was supported by overhead transparencies; it lasted for 1 hour and was followed by 24 slides of patients at varying stages of the illness and with various manifestations of the condition (content and slide details in Appendix 1). The audience was warned that some of the slides would be upsetting to the uninitiated. A full hour or more was allowed for questions and discussion, and active participation by the audience was encouraged.

Settlers' Hospital, Grahamstown
C. P. JAMESON, M.B. CH. B., M.R.C.P. (U.K.), B.A.
Department of Education, Rhodes University, Grahamstown
P. H. GLOVER, B.SC. HONS, N.H.E.D., M. LITT.

Accepted 10 Jun 1992.

TABLE I.
Participants in survey*

Group	No.	Composition	Profession
1	18	Female	Nurses
2	26	Female and male	Nursing and health care professionals
3	7	Female	Nursing sisters
4	11	Female and male	Student teachers — primary school
5	30	Female and male	Black teachers upgrading their qualifications from 2nd to 3rd year diplomas
6	23	Female and male	Student teachers — secondary school
7	9	Female and male	University lecturers
8	26	Female and male	Theology students
9	6	Female	Private school teachers

*156 participants in survey; 104 answered both questionnaires.

Limitations

One group of 30 students filled in the questionnaires but could not attend the lecture because of teaching commitments. For this reason they were not given the second questionnaire. Their lecturers were invited to attend the lecture but not all could manage this. They were given the second questionnaire only. Both these groups' opinions were analysed as their opinions are of interest. One hundred and four respondents answered both questionnaires and attended the lecture.

Results

Awareness (Table II)

All participants were aware of the condition. Initially only 64% were aware of what the acronym AIDS stood for and 79% that a virus caused the disease. Only 46% knew how it was transmitted and of these only 24% knew that there is a latent phase followed by an active disease phase. With regard to treatment 41% did not know that there is no curative treatment available. One must conclude that although the term AIDS is widely publicised and well known, the actual mechanism of the disease is poorly understood. Even among health care professionals the levels of knowledge were lower than expected.

Six weeks after the lecture there was a noticeable improvement in the level of awareness. At this time 82% of respondents knew what the letters AIDS stood for (+18%); 100% knew the cause (+21%); 57% knew the routes of transmission (+11%); 37% knew the pattern the disease might follow (+13%) and 73% now realised that there was no cure (+32%).

TABLE II.
Awareness of participants (%)

Awareness of the condition	Initial	Repeat
What the acronym stands for		
Health care worker (HCW)	60	80
Teachers (T)	60	70
Priests (P)	85	83
Total	64	82
The cause		
HCW	78	100
T	79	100
P	81	100
Total	79	100
Transmission		
HCW	43	64
T	44	53
P	54	54
Total	46	57
Pattern of disease		
HCW	28	43
T	17	39
P	35	25
Total	24	37
Treatment		
HCW	65	77
T	56	73
P	59	67
Total	59	73

Attitudes (Table III)

The participants were asked what their attitude would be to sharing accommodation with an AIDS sufferer. The question was repeated in the second questionnaire. In addition they were asked what their attitude would be to a friend who contracted AIDS. Initially 27% of respondents admitted that they would feel negative towards patients with AIDS, while 53% felt positive and 20% neutral. After the lecture and discussion 15% felt negative and 69% positive; 15% remained neutral. As a result of comments made after administration of the first questionnaire a question was added that asked the participants what their attitude would be toward a close friend who had contracted AIDS. This response was positive for 82% and neutral for 16%, while only 2% felt negative. Overall this represented a dramatic change in reported attitudes, which is considered in greater detail in the discussion.

TABLE III.
Attitudes to AIDS patients (%)

	Initial			Repeat		
	Negative	Positive	Neutral	Negative	Positive	Neutral
Attitudes to sharing accommodation with an AIDS patient						
HCW	27	55	18	17	72	11
T	34	36	30	14	17	16
P	4	96	–	4	88	8
Total	27	53	20	15	96	15
Attitudes to a friend with AIDS						
HCW	–	–	82	18	–	18
T	–	4	67	–	–	29
P	–	0	92	–	92	8
Total	–	–	–	2	82	16

Education (Tables IV and V)

On the initial questionnaire 79% of respondents replied positively when asked whether they would be interested in participating in an education programme. When asked to rank in importance certain aspects which might be included in an AIDS education programme the initial weighted averages were: (*i*) medical aspects 44%; (*ii*) moral 28%; (*iii*) psychological 16%; (*iv*) sociological 8%; and (*v*) economic 4%. Six weeks later the pattern had changed to: (*i*) moral 39%; (*ii*) medical 27%; (*iii*) sociological 25%; (*iv*) psychological 8%; and (*v*) economic 1%. There was a difference of opinion between participants who felt that education was best undertaken by health educators (33%) and those who felt that the class teacher should be primarily responsible (49%). However, all felt that it should be a team effort. A majority (68%) felt that AIDS education should be part of the formal curriculum and that the topic would lend itself to a multimedia approach (e.g. videos, lectures with slides and posters) together with informal group discussions. Respondents to the initial questionnaire felt that the pupils would respond better to insiders such as class teachers (48%) than to outsiders (18%). About 30% felt that peer group leaders should be involved. In the second questionnaire 43% felt that pupils would respond best to insiders, 18% to outsiders and 31% to peer leaders. In the second questionnaire 14% opted for a mixed approach.

TABLE IV.
Role of teachers (%)

	Initial	Repeat
Interest in participating*	79	
HCWs	86	
Teachers	76	
Priests	88	
Role of the teachers		
Total		
Primary	49	50
Co-ordinating a programme	–	38
Secondary to other educators	51	12
HCWs		
Primary	44	55
Co-ordinating a programme	–	30
Secondary to other educators	49	15
Teachers		
Primary	51	50
Co-ordinating a programme	–	41
Secondary to other educators	49	9
Priests		
Primary	58	65
Co-ordinating a programme	–	30
Secondary to other educators	42	5

*Asked only once — by completing the second questionnaire they demonstrated willingness to participate

Moral issues (Tables VI and VII)

The participants were asked whether AIDS education for children should focus on moral issues such as the eschewing of promiscuity, casual sex and sex outside monogamous relationships or, alternatively, on safer sexual practices such as the use of condoms. Initially 62% felt that safe sex should be the focus while 36% felt that moral issues should dominate. The second time 65% felt that issues of monogamy and changes in behaviour patterns should be emphasised while only 25% favoured talk of and instruction in safe sex *and* moral issues; 12% favoured a focus on safe sex alone and 38% education on moral issues alone. On the second questionnaire 'moral issues' rose from 38% to 64% of the sample, and 'education about safe sex' from 12% to 30%; a mixed approach was favoured by only 6%. It was felt by 91% of respondents to the first questionnaire that parents should be included in the AIDS education programme either by asking for their consent to teach their children in the classroom or by discussing the subject with them at PTA meetings.

Initially 32% felt that AIDS education should begin in the 12 - 16-year age group, and 29% felt that all pupils over 8 years of age should be included. Only 15% felt that the 8 - 12-year-olds were the age group to focus on and 24% said that one should only educate the over-16s. In the second questionnaire those who favoured 8 - 12-year-olds as the priority group increased from 15% to 62%, those who favoured the 12 - 16 group decreased from 32% to 7% and those the over-16 group from 24% to 3%. In the second questionnaire 23% of participants suggested that the age at which education should begin was under 8 years! It is interesting to note that after the lecture there was a strong opinion shift towards education at lower ages. This notion is in keeping with opinions emanating from the World Health Organisation.

TABLE VI.
Total focus of educational programmes (%)

	Initial	Repeat
Education to focus on		
Safe sex	62	25
Lifestyle changes	36	65
Both	2	10
Perception of the preferred focus of parents		
Safe sex	12	30
Lifestyle changes	38	64
Both	50	5
Age to start education		
< 8	–	28
8 - 12	15	62
13 - 16	32	7
Over 16	24	3
All	29	–

TABLE V.
Implementation of education programme (%)

	Initial				Repeat			
	HCW	T	P	Total	HCW	T	P	Total
Part of formal curriculum	84	59	80	68	81	41	77	61
Part of informal curriculum	16	41	20	28	19	59	23	36
Multimedia	63	71	74	65	80	76	92	83
Learning from insiders	44	53	54	48	44	47	48	43
Learning from outsiders, e.g. health educators	15	20	25	18	9	36	12	18
Learning from peers	41	27	21	30	47	17	43	31

TABLE VII.
Focus on education programmes (%)

	Initial			Repeat		
	HCW	Teachers	Priests	HCW	Teachers	Priests
Education to focus on						
Safe sex	71	61	46	33	12	33
Lifestyle	29	35	54	52	79	63
Both	–	4	–	15	9	4
Preferred focus of parents						
Safe sex	18	8	11	38	9	33
Lifestyle	18	41	26	56	82	63
Both	64	51	63	6	9	4
Priority age for education						
< 8	–	–	–	3	8	21
8 - 12	16	28	21	53	36	38
13 - 16	54	38	37	40	34	21
Over 16	30	33	42	34	22	20

The future

The majority of respondents felt that AIDS education could successfully prevent the spread of AIDS (85%). After the formal lecture this figure rose to 92%. Most respondents felt that unless some form of intervention programme was mounted soon, the future would be characterised by 'many deaths', 'disaster' and 'many innocent victims'. This indicated a strong positive belief in the value of education as a means of changing the gloomy prognosis.

The problems with AIDS education were seen as the results of 'cultural differences', 'AIDS being used as a political tool', 'illiteracy', 'indifference on the part of the public', 'lack of morals', 'narrow-mindedness' and the 'absence of sex education in schools'.

It was felt that there was a need to educate parents, teachers and pupils and that AIDS education should be continuous. The majority of respondents favoured explicit AIDS education programmes and felt that children should be encouraged to talk freely about sex and AIDS in school. This finding corroborates that of Robinson[7] who surveyed parents, teachers and pupils in three private South African schools.

Discussion

It was obvious that participants in this study were enthusiastic about participating and question time after the formal lecture typically lasted an hour or more. After the programme there was a marked improvement in awareness of the facts about AIDS although it was also obvious to the authors that one lecture was not sufficient for full assimilation of all the facts. This demonstrated the need for AIDS awareness programmes to be continuous since attitude changes are even more elusive than knowledge recall.

Although a significant proportion of the sample was committed to education *per se*, all participants felt that education was a critical factor in the fight against AIDS. It was interesting that with more information the somewhat negative initial attitude to dealing with AIDS sufferers improved. This suggests that fear of AIDS is the result of ignorance and that education would relieve the anxiety caused by having to deal with the unknown. Similarly after the lecture there was a more positive attitude on the part of the teachers to teaching their pupils about AIDS. From these indications one is drawn to the conclusion that AIDS education programmes are essential in the fight against AIDS for more than the mere imparting of knowledge about its spread. After discussion it was accepted by most of those attending the formal presentations that education should begin with children, particularly those in the 8 - 12-year age group, a group which is generally not sexually active but is beginning to take an active interest in the subject. The recommendations by the WHO were that funding be directed at education of children below the age of 12 years. Therefore by implication it was accepted that once children or young adults became sexually active it was: (*i*) much more difficult to alter their patterns of sexual behaviour;[6] and (*ii*) in certain cases it would even be too late because the moment a person becomes sexually active he or she becomes vulnerable to the disease. It was felt that in this group it was meaningful to see education as a means of altering accepted sexual mores, in contrast to the education approach aimed at that sector of the population which was already sexually active and for whom the only meaningful education would be encouragement to practise 'safe sex'.[8,9]

Finally it was interesting that almost all participants felt that an active education programme could successfully avert the threatening AIDS crisis.[10] Even if this perception starts out as an expression of hope rather than rational judgement and even if it might be seen as a 'natural' view for the sample chosen, the considerable shift in viewpoint is both significant and encouraging.

REFERENCES

1. Friedland RH, Jankelowitz SK, De Beer M, *et al.* Perceptions and knowledge about acquired immune deficiency syndrome among students in university residences. *S Afr Med J* 1990; **79:** 149-154.
2. Do Buono BA, Zinner SH, Daaman M, McCormack WM. Sexual behaviour in college women in 1975, 1986 and 1989. *N Engl J Med* 1990; **322;** 821-825.
3. Padayachee GN. Evaluation of AIDS prevention programmes — the key to success. *S Afr Med J* 1991; **80:** 310-311.
4. Padayachee GN, Schall R. Short-term predictions of the prevalence of human immunodeficiency virus infection among the black population in South Africa. *S Afr Med J* 1990; **77:** 329-333.
5. Schoub BD. The AIDS epidemic in South Africa — perceptions and realities. *S Afr Med J* 1990; **77:** 607-608.
6. Mathews C, Kuhn L, Metcalf CA, Joubert G, Cameron NA. Knowledge, attitudes and beliefs about AIDS in township school students in Cape Town. *S Afr Med J* 1990; **78:** 511-516.
7. Robinson M. An investigation into pupils' knowledge of and attitudes towards AIDS: a survey of four private schools. Masters' thesis, Rhodes University.
8. *Criteria for the Evaluation of South African Qualifications for Employment in Education.* Department of Education and Culture (House of Assembly). *Hansard Parliamentary Reports* 1991; **29:** (11.4.1.6).
9. Hendricks M. Underestimation of AIDS — there's nothing to be optimistic about. *S Afr Med J* 1988: **73:** 573-574.
10. Africa's growing Aids Crisis. *New Scientist* 1991; **Nov:** 38-41.

Appendix 1

Lecture. There was a lecture lasting 30 minutes which included information on the following topics: Cause of disease, transmission, clinical manifestations, treatment, and mode of death.

Video. There was a 20-minute excerpt from a video on AIDS.

Slides. There were 20 slides covering the following subjects: demography; clinical stages of the disease and progression; fungal infections; dermatitis; mandibular abscess; lymphoma glands; Kaposi's sarcoma; systemic manifestations — loss of weight, septicaemia, epidermolysis in a baby and Stevens-Johnson drug reaction; genital warts; genital condylomata; theories about vaccines; and safe sex — the relative risks of sexual practices.