AIDS: Knowledge and attitudes of a group of South African health professionals

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The results of a survey into attitudes to, and knowledge of, AIDS conducted on a group of 74 South African health professionals are described. Based on a similar British study by McManus and Morton, the authors sought to establish the degree to which attitudes to AIDS correlate with knowledge about AIDS, and the degree to which such attitudes correlate to attitudes towards the sexuality of 'high-risk' groups; homosexuals and blacks. Attitudes to AIDS appear to correlate significantly more highly with attitudes to high-risk groups than with knowledge concerning AIDS. The implications of these findings for educative intervention are briefly discussed.

Die resultate van 'n onderzoek na die houdings en kennis oor VlGS van 74 Suid-Afrikaanse professionele persone in die Gesondheidsdiens word beskryf. Die studie is gebasseer op 'n soortgelyke Britse studie deur McManus en Morton en op grond hiervan het die navorsers gepoog om die graad waartoe houdings teenoor homoseksualiteit en swart seksualiteit bepaal as verteenwoordigend van waargenome 'hoe-risiko'-populasies in Suid-Afrika. Houdings teenoor VlGS korreleer beduidend hoër met houdings teenoor hoe-risikogroep wat met kennis van VlGS. Die implikasies van hierdie resultate vir opvoedkundige ingrepe word kortliks bespreek.

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Over the past decade, there has been growing concern about the rapid spread of 'acquired immune deficiency syndrome' (AIDS), throughout the world. South Africa has been amongst those countries in which this concern has been demonstrated in ongoing monitoring of AIDS cases and the generation of research (IJsselmuiden et al., 1988). AIDS was first diagnosed in this country in 1982 and seems to be increasing steadily. By December 1990, 613 full-blown AIDS cases had been positively diagnosed (South African Institute for Medical Research, 1991), and it is estimated that as many as 100 people may be HIV infected for every such AIDS case identified (South African Institute for Medical Research, 1991). The mean doubling time for AIDS in South Africa is 11,4 months (IJsselmuiden et al., 1988, p. 457). There is therefore an urgent need to continue with research and to plan for both management and prevention of the syndrome.

Much of the research on AIDS has focused on epidemiological and physical aspects of the syndrome (Cooper, 1985; Gottlieb, 1987; Institute of Medicine/National Academy of Sciences, 1986). However, IJsselmuiden et al. (1988) emphasize 'the importance of psychosocial research in the prevention of HIV transmission' (p. 467), and the need for such research in South Africa. This study represents an attempt to enlarge on these psychosocial dimensions by investigating attitudes to AIDS amongst a group of South African health professionals. Since doctors and nurses are often the frontline personnel involved in dealing with AIDS cases, it was thought that their attitudes to these patients is of significance for treatment and prevention purposes.

One of the major difficulties in dealing with AIDS is the moral censure and judgment which surrounds the syndrome. As Watney (1987) argues: 'Fighting AIDS is not just a medical struggle, it involves our understanding of some of the words and images which load the virus down with such a dismal cargo of appalling connotations' (p. 3). Since the high-risk groups identified, that is, homosexuals, prostitutes, intravenous drug users and blacks (Gottlieb, 1987) tend to be characterized by negative stereotypes, this has influenced general social perceptions of AIDS sufferers. In South Africa these perceptions are compounded by the racial divisions in our society, and are likely to be influenced by the different social, economic and political conditions affecting each race group (Mokhobo, 1988; IJsselmuiden et al., 1988). We need to understand these attitudes if we are to introduce effective education programmes (Critical Health, April 1988; Green, 1988; IJsselmuiden et al., 1988).

It has been widely assumed that effective education about AIDS involved teaching people the facts concerning the syndrome, and that this knowledge would be sufficient to dispel the prejudices and misconceptions surrounding the virus and its sufferers. However, recent psychological research (McManus & Morton, 1986; Searle, 1987; Furnham, 1988) suggests that knowledge about AIDS may not be the prime determinant of attitudes to AIDS and that educational initiatives may need to address prevailing attitudes to high-risk groups at the same time as supplying information. This study investigated the relationship between attitudes to AIDS and knowledge about AIDS as well as attitudes to the sexuality of two perceived high-risk population groups; blacks and homosexuals.
Aims
The study investigated the degree of correlation between a measure of subjects' 'Attitudes to AIDS' and the following three variables:
Knowledge about AIDS
Attitudes to homosexuality
Attitudes to black (African) sexuality

Subjects
Permission was obtained to carry out the study in a general hospital servicing predominantly white and coloured population groups. Participation in the study was voluntary. In total 80 subjects were approached to participate in the study, of whom 74 completed the questionnaire on which the analysis is based.
Of the 74 subjects:
- 43 were nursing sisters, 31 were doctors
- 48 were female, 26 were male
- 61 were white, 7 coloured, 4 Indian and 2 African
- the age range was from 22 to 64 years (mean age 38 years)

Apparatus
The questionnaire used in the present study was based on a scale developed by McManus and Morton (1986). This scale incorporated three basic areas of concern: Knowledge about AIDS, attitudes to AIDS and attitudes to homosexuality. These sections were used verbatim except for changes in wording to accommodate to the South African setting. In relation to the South African context, it was considered useful to include an additional section on attitudes to black (African) sexuality. Questions in this section were constructed on the basis of South African literature and resources, (Clauson, 1988; Mokhobo, 1988; Van der Groen, 1988; Whiteside, 1988) in consultation with professional colleagues. The four sections of the questionnaire encompassed the following broad dimensions:
   1.1 General knowledge about AIDS, eg. 'AIDS was first diagnosed in the last decade'.
   1.2 Questions about transmission, symptoms and presentation of AIDS, eg. 'All persons having antibodies to HIV must be assumed to be infected'.
   1.3 Questions about AIDS in the South African context, eg. 'The incidence of AIDS is highest in the black population in South Africa'.
2. Attitudes to AIDS (12 items).
   2.1 Responsibility for treatment, eg. 'More health professionals should become involved in the fight against AIDS'.
   2.2 Moral judgement, eg. 'AIDS is a punishment for immoral activities'.
   2.3 Fear-based prejudice, eg. 'AIDS patients should be avoided wherever possible'.
   2.4 Rights of AIDS sufferers, eg. 'Informed consent should not be essential before HIV sero testing'.
3. Attitudes to Homosexuality (12 items).
   3.1 The normality or deviance of homosexuality, eg. 'Homosexuality is a psychological disorder'.
   3.2 Moral judgement, eg. 'Homosexuality is immoral'.
   3.3 The rights of homosexuals, eg. 'Homosexuals should have equal opportunities for employment'.
4. Attitudes to the Sexuality of Black (African) People (12 items).
   4.1 The degree to which behaviour meets 'civilized' standards, eg. 'AIDS will spread faster amongst Blacks because they care less about hygiene'.
   4.2 Moral judgments, eg. 'Black people are more promiscuous than other races'.
   4.3 Rights of black AIDS sufferers, eg. 'Black migrant workers should be deported if they are found to be HIV seropositive'.
   4.4 Perceptions of normality or deviance, eg. 'Black people are no more highly sexed than other race groups'.

The first part of the questionnaire consisted of the 18 knowledge questions and the latter part was comprised of the 36 attitudinal items in random sequence. It required approximately 30 minutes for completion. Knowledge questions required a true/false or right/wrong answer, whereas attitudinal questions were rated on a 5-point Likert scale, from strongly disagree (1) to strongly agree (5).

Procedure
A pilot study was conducted to ensure that the questionnaire was effective. Following minor modifications the questionnaires were then individually administered. Subjects were assured of confidentiality and urged to respond as honestly as possible. The data were collected over a two-week period during 1988.

The questionnaires were individually scored and then subjected to statistical analysis. Each question was individually analysed in terms of validity and content and the frequency of responses. In addition correlations were calculated between the four dimensions of the questionnaire, using a Pearson's product-moment correlation. Correlations were based on the mean score for each subject on each of the four sections of the questionnaire related to the variables under study. Since multiple correlations were made, only those correlations measured as significant at the 0,01 level were considered to be significant in order to ensure statistical rigour.

Results
Only the correlational data is presented below, since this is most cogent for the paper. The correlations between the four variables are illustrated in Table 1.

Discussion
As is evident from the table, several significant correlations emerged. In general, the results are consistent with those reported by McManus and Morton (1986). Certain differences are, however, notable.

Knowledge about AIDS
In general subjects displayed a fairly good factual knowledge of AIDS, with scores ranging from 51% correct to 94% correct. The mean per cent correct was 75%. These scores were superior to those obtained from the McManus
and Morton (1986) study on medical students where the mean per cent correct was 65% (range 3%-91%). Thus this group of South African medical personnel appear to have a relatively well-informed knowledge of AIDS. However, the data on the attitudinal dimensions of the questionnaire present a more complex picture.

Knowledge about AIDS and attitudes to AIDS
In the British study McManus and Morton (1986) found no significant correlation between knowledge about AIDS and attitudes to AIDS. In the South African study however, there was a positive correlation between these two factors (0.22) tending towards significance ($p < 0.05$). It would appear that the contextual and temporal variation between the two studies seems to offer the most plausible explanation for this difference in findings.

South African health professionals have been able to benefit from knowledge generated by the international community, including that generated since the McManus and Morton (1986) study; and to absorb this knowledge at a medical perspective. This may account for their relatively better informed perspective on AIDS which may consequently have had some influence on their attitudes to the condition.

However, the apparently more informed view of these South African respondents is counteracted by findings in relation to the other dimensions assessed. The significant correlations evidenced between attitudes to AIDS, attitudes to homosexuality and attitudes to the sexuality of black people, ($p < 0.001$), tend to indicate that attitudes to AIDS are more strongly related to these attitudes than to objective knowledge.

Attitudes to homosexuality and attitudes to AIDS
Attitudes to AIDS are most highly correlated with attitudes to homosexuality (0.60). This finding would appear to confirm the conclusion offered by McManus and Morton (1986), that these two factors were intrinsically linked in the perceptions of their medical student subjects. The historical stigmatization of homosexuals has been exacerbated by their association with AIDS (Gottlieb, 1987). While there is some factual basis to the association between AIDS and homosexuality in terms of their identification as a high-risk group, attitudes seem to be determined by negative associa-

<table>
<thead>
<tr>
<th>Knowledge about AIDS</th>
<th>Attitudes to AIDS</th>
<th>Attitudes to homosexuality</th>
<th>Attitudes to the sexuality of blacks</th>
</tr>
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<tbody>
<tr>
<td>AIDS</td>
<td>0.22</td>
<td>0.03</td>
<td>0.00</td>
</tr>
<tr>
<td>Attitudes to AIDS</td>
<td>0.60***</td>
<td>0.40***</td>
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<tr>
<td>Attitudes to homosexuality</td>
<td></td>
<td></td>
<td>0.43***</td>
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* $p < 0.05$

Attitudes to black sexuality and attitudes to AIDS
Similarly, there appears to be a strong correlation between the respondents’ perceptions of black sexuality and their attitudes to AIDS. Although this dimension has not been assessed in previous studies, the South African media has tended to emphasize the susceptibility of black members of the population to the syndrome (Critical Health, April 1988) and there has been some concern about the possible importation of AIDS through the migrant labour system (Whiteside, 1988; Critical Health, April 1988). The relationship between attitudes to AIDS and attitudes to the sexuality of blacks is significantly correlated, ($p < 0.001$), with an overall correlation of 0.40. Given the degree of racial prejudice in this country it is not surprising that certain stereotypes regarding black sexuality should be associated with prejudice against AIDS sufferers. For this group of predominantly white hospital staff, attitudes to AIDS sufferers may not be free of racial stereotypes and this may influence their handling of such cases.

Attitudes to homosexuality and attitudes to black sexuality
It is not surprising that attitudes to homosexuality and attitudes to black sexuality were found to be positively correlated (0.43). It seems that where subjects tended to hold prejudiced views towards homosexuality this prejudice is also evidenced in their perception of the sexuality of black people.

Conclusion
While these correlational findings cannot be read as indicating that attitudes to AIDS are engendered by attitudes to homosexuality or by attitudes to black sexuality, the findings indicate a tendency for censorial or negative attitudes in one area to be related in other areas. The findings suggest that for this group of health professionals, pre-existing attitudes to perceived high-risk groups and their sexual practices are likely to influence attitudes to AIDS more strongly than is objective knowledge.

Implications for intervention
Having established that this group of medical staff hold views about AIDS which are strongly related to their attitudes to particular social groupings and which may be at odds with their objective knowledge, what are the implications of this for AIDS education and intervention in South Africa?

Education about AIDS remains the single most effective option available for altering the course of the epidemic (Sherr, 1987). However, the unelaborated dissemination of
knowledge about AIDS has been shown to have minimal impact at the level of changing attitudes or behaviour of either the general public, medical professionals or 'high-risk' groups (McManus & Morton, 1986; Phillips, 1988; Sherr, 1987). This study appears to have confirmed this finding for a particular South African subject population. What seems to be required of AIDS education is to go beyond people's factual understanding of the disease, to those attitudes and biases that influence their perception of the epidemic. The pre-existing, influential constructs which surround the groups implicated in the syndrome need to be challenged and addressed at a conscious level. Thus education programmes need to explore and counter prejudicial attitudes related to high-risk groups and their sexual behaviour, as well as to supply factual information.

In South Africa it seems that education programmes need to include a focus on homosexuality and general perceptions of other race groups and more particularly their sexual practices if we are to produce more enlightened and objective attitudes to AIDS. Since the future progression and management of the syndrome in this country is partially dependent on such attitudes, this kind of educational initiative is vital and further research should be promoted in this direction. Education needs to take place at all levels, both amongst practitioners and those in training in the health professions, and the public on a mass scale (Ijsselmuiden et al., 1988).

With the opportunity to learn from some of the errors in other parts of the world we need to take seriously the challenge such research presents us.

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References


