AIDS AND SEXUALITY EDUCATION IN THE PHYSIOTHERAPY CURRICULUM

INTRODUCTION
Since the first reports in the early 1980s, acquired immune deficiency syndrome (AIDS) is spreading inexorably across the African continent. AIDS is essentially a sexually transmitted disease, and the causative virus is the human immunodeficiency virus (HIV). In South Africa, the prevalence of AIDS poses a challenge. Records epidemiology of AIDS, a lack of knowledge of the transmission and problem1. Published studies in has not matched the extent of the hundred thousand HIV-infected suggests that there are about five immunodeficiency virus (HIV). In cy syndrome (AIDS) is spreading Since the first reports in the early AIDS patients with or without brovascular accidents, spinal cord non-Africans5 6. These include pro­ A IDS patients in Africans1'5 and have been well documented.7'8 A of AIDS, along with anxiety and sexual practices2'3. A number of neurological mani­ facts have been reported in physiotherapy students in the University of the Western Cape, a set of questionnaires is administered to new first-year students during the annual University orientation programme. The students are informed in writing about the purpose of each question­ naire, and their rights to refuse to divulge any information requested. Each questionnaire is completed anonymously to main­ tain confidentiality. One of the questionnaires is a validated 30­item questionnaire which mea­ sures knowledge of AIDS and atti­ tudes towards people with AIDS and homosexual persons.50 Currently, there is a dearth of information on the impact of AIDS on physiotherapists and physio­ therapy services in South Africa. Therefore the aim of this study was to evaluate the available data on the knowledge and attitudes of physiotherapy students in the University of the Western Cape regarding AIDS. The outcome of the study was intended to establish the extent of the students’ knowl­ edge deficits, and to provide data to inform curriculum development in physiotherapy education.

METHOD
Data supplied by three groups of prospective first-year physiotherapy students in 1991 (N=35), 1992 (N=28) and 1993 (N=41) were retrieved from the data bank which contained information on all first-year students who attended the orientation programme in the specified period. The prospec­ tive students indicated that they desired to study physiotherapy but not all of them were admitted into the programme. Only 19, 27 and 30 students respectively registered for physiotherapy in 1991, 1992 and 1993. Only questions which were responded to by most of the subjects over the three years were considered. Thus responses to only 20 items on the 30-item question­ naire (Tables I & II) were analysed.

The students who were admitted into the physiotherapy programme in 1993 are currently in the fourth year of training. In order to evaluate any difference between their level of knowledge and attitudes in the first and fourth years of training, the 20-item questionnaire was readministered to this group of students. An additional question was included which assessed will­ ingness to give physiotherapy treatment to a patient with AIDS.

The information retrieved included sociodemographic items, five items on attitudes towards people with AIDS and fifteen items measuring knowledge about the transmission of the HIV virus. All items testing attitude and knowledge were rated as “True”, “False”, and “Don’t Know”. Levels of anxiety concerning contact with a person with AIDS were measured on a 3­ point Likert-type scale, with a score of 1 reflecting no anxiety, and a score of 3 reflecting much anxiety. In addition, there were

ABSTRACT
The need for physiotherapy in the multidisciplinary man­ agement of patients with AIDS is generally acknowledged. Physiotherapists should understand the disease, and develop appropriate attitudes towards individuals with AIDS. Data obtained from questionnaires completed at the University of the Western Cape by prospective physiother­ apy students between 1991 and 1993, on knowledge of and attitudes about AIDS, were analysed. The same ques­ tionnaire was re-administered to a group of physiotherapy students completing their fourth-year of study. Although most of the students indicated accurate knowledge about AIDS, their attitudes were uncertain. Students expressed anxiety about contact with persons with AIDS. The findings suggest the need for the inclusion of AIDS education in the physiotherapy education curriculum at the University of the Western Cape.
three 9-category items which sought information concerning where the respondent first heard about sexual intercourse, AIDS and the use of condoms. Finally there were two questions relating to the sexual behaviour of the respondents. The retrieved data were collated and frequencies for all variables reported in percentages.

RESULT
The mean age of the respondents in the three groups of prospective physiotherapy students was 19.7 years (sd=1.0), 21.8 years (sd=1.1), and 18.4 years (sd=1.8) respectively. All were unmarried. Over 34% of all the respondents (N=104) had already had sexual intercourse before admission to the University. Fifteen respondents (14.4%) were undecided about whether they would have sex with a person known to have been infected with a sexually transmitted disease (STD), though 83 respondents (79.8%) would not. The remaining six indicated readiness to have sex with a partner known to have been infected with a sexually transmitted disease. The respondents' first learning exposures to AIDS were primarily through the mass media (32.7%), reading (28.8%), and through information received from their high school guidance counsellors (18.3%). Similarly, the respondents' first learning exposures to sexual intercourse were through reading (29.8%), parents (20.2%) and guidance counsellors (15.4%). First learning exposures to the use of condoms were from friends (42.3%), guidance counsellors (20.2%) and through reading (15.4%).

In terms of attitudes to people with AIDS, most of the respondents had a positive attitude (Table I).

The respondents' level of knowledge about AIDS is shown in Table II. About 65% of the 104 respondents gave correct responses while about 20% indicated "don't know". The mean level of anxiety about contact with a person with AIDS was highest among the 1993 cohort. Respondents had a mean score of 2.93 (sd=1.1; N=41), while in 1991 and 1992, the mean scores were 1.71 (sd=0.62; N=35) and 1.71 (sd=0.66; N=28) respectively.

In re-administering the questionnaire to current fourth-year students, data was obtained from 15 (out of a total of 24) students. Eleven students (73.3%) indicate that they would not readily have sex with a person known to have been infected with a sexually transmitted disease. The remaining 4 students (26.7%) were undecided. In testing the level of knowledge about AIDS, the average number of students who gave correct responses was 12 (Table IV).

The level of anxiety expressed about contact with a person with AIDS showed a mean score of 1.73 (sd=0.57). Four respondents (26.6%) were ready to give hydrotherapy, in a pool, required in the treatment of a patient with AIDS, but 10 respondents (66.7%) were undecided.

DISCUSSION
Attitudes
The attitudes of the respondents can affect the quality of patient care. It seems few respondents had negative attitudes towards people with AIDS (Table I). However an appreciable number of respondents were undecided about their attitudes. Adding the number of respondents with negative attitudes to those who were undecided, there appears to be a sizeable number of the prospective physiotherapy students who had negative attitudes towards people with AIDS. It would seem that the attitude of fourth-year students had improved compared to those expressed by this cohort in 1993, but a few students expressed uncertainty about their attitudes. The uncertainties in attitudes expressed in this study is similar to those reported among rehabilitation personnel in Zimbabwe, occupational therapy students in the US, and prospective students in Social Work at the University of the Western Cape.

KNOWLEDGE
Most of the respondents gave correct responses to the statements regarding the causes of AIDS and mode of transmission of the HIV virus. The percentage who gave correct responses was 48.6% in 1991, 75.0% in 1992, and 73.2% in 1993. Respondents in this study seem to have a higher level of knowledge about AIDS than prospective students in Social Work. The percentage who reflected correct responses among prospective students in Social Work was 46.6% in 1991, 57.4% in 1992, and 63.8% in 1993.

When the questionnaire was re-administered to fourth-year physiotherapy students in 1996, 80%
gave correct responses, which was an improvement when compared with 1993. In 1996, there was also a decrease in the level of anxiety about contact with a person with AIDS. However, the decrease in anxiety was not reflected in the willingness of the fourth-year students to give hydrotherapy in a pool for the rehabilitation of a patient with AIDS.

An appreciable number of the respondents (34%) had already had sexual intercourse at the time they were admitted to the University. Fifteen respondents (14.4%) were uncertain whether they would have sex readily with a partner known to have been infected with a sexually transmitted disease in the past. A comparison of the 1993 prospective students (N=41) and the same cohort of fourth-year physiotherapy students (N=15), showed that 14.6% in 1993, and 26.7% in 1996 were undecided about having sex with a partner known to be infected with a sexually transmitted disease. For most of the prospective students, the major sources of first-learning exposure about AIDS, sexual intercourse and safe sexual practices were through reading materials, the media, and guidance counsellors in high schools. The University therefore faces a challenge to find ways of disseminating relevant information about healthy lifestyles to new students.

Attitudes expressed by the prospective and current physiotherapy students to AIDS, coupled with the uncertainty about safe sexual practices, as well as the learning resources used, suggest an urgent need for the inclusion of AIDS and sexuality in the physiotherapy curriculum. Such material will assist in orienting the students towards a healthy lifestyle, as well as preparing them to offer treatment to patients with AIDS by improving their level of knowledge and attitudes towards AIDS among physiotherapy students may be one of the steps which would assist in combating prejudice, and preparing the students to work with AIDS patients. Based on the information presented here, it is recommended that a course on AIDS and sexuality be included in the undergraduate physiotherapy education curriculum at the University of the Western Cape.

### TABLE II


<table>
<thead>
<tr>
<th>Statement</th>
<th>TRUE (%)</th>
<th>FALSE (%)</th>
<th>DON'T KNOW (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health workers and others who care for people with AIDS are likely to contract AIDS themselves</td>
<td>19.2</td>
<td>56.7</td>
<td>19.2</td>
</tr>
<tr>
<td>The country's blood supplies are probably contaminated by the HIV virus at the present time</td>
<td>27.9</td>
<td>44.2</td>
<td>27.9</td>
</tr>
<tr>
<td>You can contract AIDS by giving blood</td>
<td>37.5</td>
<td>46.2</td>
<td>16.3</td>
</tr>
<tr>
<td>Most people who have HIV virus in their blood will eventually develop AIDS</td>
<td>36.5</td>
<td>24.0</td>
<td>33.7</td>
</tr>
<tr>
<td>It is impossible to contract AIDS without an exchange of body fluids</td>
<td>58.7</td>
<td>16.3</td>
<td>25.0</td>
</tr>
<tr>
<td>A person can have no symptoms and still be infectious</td>
<td>74.0</td>
<td>2.9</td>
<td>21.2</td>
</tr>
<tr>
<td>Intravenous drug users are in the high risk group for contracting AIDS</td>
<td>61.5</td>
<td>6.7</td>
<td>22.1</td>
</tr>
</tbody>
</table>

**If one is in contact with a person with the HIV virus, there is a high risk of contracting AIDS by:**

- sharing coffee cups: 1.9, 77.9, 10.6 (n=94)
- contact with their blood: 83.7, 1.0, 5.8 (n=94)
- touching their clothing: 5.8, 86.5, 2.9 (n=99)
- using the same toilet: 11.5, 5.7, 2.2 (n=94)
- sexual intercourse: 98.1, 0.0, 1.0 (n=103)
- touching the genitals with the hands: 12.5, 39.4, 38.5 (n=94)
- kissing on the lips: 6.7, 65.4, 18.3 (n=94)
- kissing on the cheek: 1.9, 87.5, 10.6 (n=104)

**NOTE:** The sample sizes vary slightly because information was missing for some items.
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REFERENCES