

NURSING STUDENTS' KNOWLEDGE AND OPINIONS CONCERNING AIDS

Alan D. Bowd and Cynthia H. Loos

The need to provide relevant information to dispel the myths and prejudice about AIDS and AIDS patients, has direct implications for nurses. It is widely considered that AIDS will continue to develop as an increasingly serious public health problem during the next five years, given the growing number of cases reported and the long incubation period of the Human Immunodeficiency Virus (HIV) (Morgan & Curran, 1986). Nurses will need accurate epidemiological and scientific knowledge about AIDS to fulfil both their educational and health care role (Schietinger, 1986). Appropriate attitudes towards the AIDS patient and the family depend upon accurate knowledge, and are the foundation for the provision of holistic care so that physical needs may be met and the psychological distress experienced by this client group might be alleviated (Coates, Temoshole & Mandel, 1984).

Literature Review

Much of the published research concerns the nature and transmission of AIDS (Bennett, 1986; Henderson, 1984; Krim, 1986). Bertolini reported in February, 1986, that approximately 500 cases of AIDS were recorded in Canada. "Of these cases 76.4% were homosexual males, 2.5% were heterosexual partners of high risk individuals, 1.3% were hemophiliacs, and 0.3% were intravenous drug users. The remaining 19.5% included children who acquired the disease from their mothers before birth and a group classified as unknown" (p. 2). By February, 1987, the number of reported cases had risen to approximately 950.

The psychosocial implications of AIDS for the patient, the family and the nurse, are considerable. Reports of neglect and ostracism of, and insensitivity towards, AIDS victims are documented both in lay publications and in professional journals. Loss of health, job, finances, friends, family, self-esteem and independence are some of the reported social effects of AIDS (Cecchi, 1986; Newmark, 1984; Rubinow, 1984). In a study to

Alan Bowd, Dip.Ed., M.A., Ph.D. is a professor in the School of Education, Lakehead University. Cynthia Loos, R.N., B.Sc.N., M.Ed., is an assistant professor in the School of Nursing, Lakehead University in Thunder Bay, Ontario.

determine how a homosexual community coped with AIDS, subjects described the strains created by the disease and how the behavioural changes made necessary by the disease were inconsistent with their lifestyle and placed added strain on the community (Joseph et al., 1984).

Reactions of nursing staff towards AIDS patients have been varied. Very little research exists concerning the knowledge and attitudes of nurses with regard to AIDS. Rosse (1985) reported that there was a reluctance of nursing staff to work with a psychiatric patient who had AIDS. Staff believed that transmission was possible even though the mode of transmission had been made clear to them. This observation was supported by Reed, Wise and Mann (1984), who found that fear of the spread of the disease was common among nurses despite a reasonable knowledge of AIDS. A survey of hospital personnel and their understanding of AIDS indicated widespread misconceptions about the transmission of the disease (Valenti & Anarella, 1986). Studies of student teachers, experienced teachers and special education teachers regarding knowledge and opinions about AIDS also indicated a significant lack of knowledge about AIDS among all three groups (Bowd, 1987a, 1987b).

The prognosis of AIDS, and the prediction of its course, require that nurses be knowledgeable about the nature of the disease and its social and public health implications. It is also important that appropriate attitudes concerning care of AIDS patients be fostered so that their physical and psychosocial needs may be met appropriately. The present study addresses these issues.

Method

One hundred and fourteen students enrolled in the Bachelor of Science (Nursing) program at an Ontario university participated in the study. This group consisted of 47 Year I students (44 females, 3 males, mean age 21 years); 46 Year IV students (44 female, 2 male, mean age 23 years); and 21 registered nurses enrolled in the R.N. Streaming Program (R.N.'s) (all females, mean age 36 years). All students enrolled in these sections of the program participated in the study.

A 15-minute questionnaire was completed in February, 1987; anonymity and confidentiality were protected. As well as background information, five items assessed knowledge of AIDS, one item concerned beliefs about transmission modes, and one open-ended item required the naming of the disease. Twelve items employing a five-point Likert-type scale assessed opinions about AIDS related issues in nursing practice.

Table 1***Percent Correct Responses to Factual Items about AIDS***

Item (answer)	Year 1 Students	Year 4 Students	Experienced RNs
What do the initials AIDS stand for? (Acquired Immunodeficiency/Immune Deficiency Syndrome)	36.2	32.6	28.6
The cause of AIDS is (A virus that attacks the body's immune system)	83.0	82.6	90.5
Patients suffering from the disease AIDS currently have a mortality rate of (no client with AIDS is likely to survive the disease because there is currently no successful treatment)	95.7	93.5	90.5
The number of persons suffering from the disease AIDS (i.e. not simply carrying anti-bodies) in Canada in early 1987 was approximately (850)	40.4	47.8	61.9
A reportable disease requires that doctors and other health professionals report any suspected cases to the local medical officer of health. In Ontario, the disease AIDS (is a reportable disease)	80.9	91.3	81.00

Results

The three groups evidenced similar levels of knowledge about AIDS (Table 1) and patterns of belief about transmission of the disease (Table 2). Differences in both areas were non-significant on chi-square testing.

Two of the five factual items were answered incorrectly by large proportions of respondents. Approximately two-thirds of respondents in each

sample were unable to name the disease, given the acronym; approximately one-half were unable to indicate the actual number of individuals suffering from the disease in Canada. Notably, knowledge required for the provision of appropriate care, as opposed to general knowledge about AIDS, is relatively high.

Table 2

Knowledge Concerning Transmission of AIDS

Transmission mode	<i>Percentage believing</i>		
	Year 1 Students	Year 4 Students	Experienced RNs
Contract through the air in an enclosed environment (such as an elevator)	--	--	--
Casual contact such as shaking hands or hugging	2.1	--	--
Social contact through food preparation and eating utensils	2.1	2.2	4.8
Close contact through friendly kissing	21.3	21.7	4.8
Blood transfusions with infected blood*	95.7	100.0	100.0
Use of contaminated needles in drug abuse*	87.2	93.5	81.0
Heterosexual intercourse with an infected male*	95.7	93.5	100.0
Heterosexual intercourse with an infected female*	91.5	91.3	100.0
Homosexual intercourse*	91.5	78.3	85.7

* Known modes of transmission of the AIDS virus

Few respondents believed that AIDS was transmitted by air, in casual contact or through social interaction. Twenty-one percent of Year I and Year IV students believed transmission was possible through friendly kissing, as opposed to five percent of R.N.s; however, this difference was not statistically significant. Knowledge of sexual transmission and transmission via blood was high in all groups.

Respondents indicated their degree of agreement/disagreement with twelve opinion statements relating to social and educational implications of AIDS for nursing practice (Table 3).

Table 3

Opinions about AIDS-associated nursing issues

Item	% Agreeing	% Disagreeing	Mean*
All students should be screened for exposure to AIDS before admission to university			
Year 1 Students	25.5	55.3	3.40
Year 4 Students	10.9	78.3	3.94
Experienced RNs	23.8	66.7	3.48
Any student registering positive antibodies to AIDS should be excluded from university			
Year 1 Students	6.4	66.0	3.79
Year 4 Students	--	91.3	4.22
Experienced RNs	4.8	90.5	4.24
Any student suffering from the disease AIDS should be excluded from university			
Year 1 Students	31.9	42.5	3.09
Year 4 Students	2.2	71.8	3.98
Experienced RNs	4.8	76.2	3.95
The media have exaggerated the significance of AIDS within the community			
Year 1 Students	27.6	59.5	3.49
Year 4 Students	28.3	58.7	3.39
Experienced RNs	28.5	61.9	3.48
The responsibility of the nursing profession to educate the public regarding the reality of AIDS and how it can be avoided is a pressing one			
Year 1 Students	91.5	4.3	1.51
Year 4 Students	95.6	2.2	1.50
Experienced RNs	100.0	--	1.19
Nurses have a responsibility to help dispel some of the more destructive myths that the public accepts about AIDS			
Year 1 Students	97.8	--	1.38
Year 4 Students	97.9	2.2	1.52
Experienced RNs	95.2	4.8	1.33

Table 3 *continued*

Item	% Agreeing	% Disagreeing	Mean*
All persons suffering from AIDS should be quarantined to help restrict the spread of the disease			
Year 1 Students	29.8	38.3	3.04
Year 4 Students	2.2	82.6	4.07
Experienced RNs	4.8	80.9	4.10
Nurses need to be careful in assisting any client who is bleeding because of possible exposure to AIDS			
Year 1 Students	72.3	8.5	2.06
Year 4 Students	82.6	6.5	1.70
Experienced RNs	81.0	-.	1.76
Information concerning AIDS should form part of current staff education programs in health care institutions			
Year 1 Students	93.6	4.3	1.51
Year 4 Students	97.8	-.	1.37
Experienced RNs	100.0	-.	1.29
Information about AIDS should be provided within university level nursing programs			
Year 1 Students	93.6	2.1	1.49
Year 4 Students	100.0	-.	1.39
Experienced RNs	100.0	-.	1.38
Nurses should be well informed concerning the psychological needs of the client with AIDS			
Year 1 Students	95.8	-.	1.47
Year 4 Students	100.0	-.	1.33
Experienced RNs	100.0	-.	1.29
Nurses should be free to choose whether they directly care for a client with AIDS			
Year 1 Students	76.6	8.5	1.96
Year 4 Students	54.3	28.2	2.63
Experienced RNs	47.6	42.8	2.81

* A score of 1 indicates "strongly agree" while a score of 5 indicates "strongly disagree" A score of 3 indicates "uncertain".

There were no significant differences between year IV students and R.N.s on these items. However, the year I group indicated a higher degree of agreement with three items when compared with both other groups. These were: "Any student suffering from the disease AIDS should be excluded from university" ($p < .05$ both groups); "All persons suffering from AIDS should be quarantined to help restrict the spread of the disease" ($p < .01$ both groups); "Nurses should be free to choose whether they directly care for a client with AIDS ($p < .01$ with R.N. group, $p < .05$ with year IV group).

Very high proportions in all groups endorsed the responsibilities of nurses in AIDS education and in helping dispel public myths about the disease. Agreement with statements favouring AIDS information within university nursing courses and current staff education programs in health care institutions was virtually universal, as was support for the view that nurses must be well informed about the psychosocial needs of AIDS clients.

Of those expressing opinions, majorities in each group disagreed with compulsory screening of university students and the exclusion of HIV positive individuals and AIDS sufferers from university. Most respondents were opposed to the quarantine of AIDS sufferers, however, year I students were more likely to agree with quarantine and exclusion from university than year IV students or R.N.s.

Most respondents indicated that the media had not exaggerated the significance of AIDS in the community, that care should be exercised in assisting a bleeding client because of possible infection, and that nurses should be free to choose whether to care for an AIDS patient directly.

Discussion and Conclusions

In comparison with samples of Canadian student teachers, regular teachers and special education teachers (Bowd, 1987a, 1987b), both student nurses and experienced R.N.s enrolled in a nursing program are better informed concerning several factual aspects of AIDS. Appropriate caution, however, should be exercised in generalizing from the findings. Deficiencies exist regarding knowledge of the disease's full name and its prevalence in Canada. Knowledge of transmission modes is generally high, although it is puzzling that the homosexual transmission of the disease appears less widely known. This may reflect current media attention to the spread of the AIDS epidemic within the heterosexual community.

The tendency for few Year IV students and R.N.s to agree with items favouring screening, quarantine and exclusion may reflect professional socialization in nursing, but at the same time indicates the importance of including such issues in AIDS education programs.

The opinion of many respondents that nurses should be able to choose whether to care directly for AIDS patients may indicate the existence of irrationally based anxiety about transmission of the disease. Such fears might be eliminated by appropriate education. Nurses accept professional responsibility for all patients (Philpott, 1985), and ethical, as well as social and psychological implications of AIDS are clearly important in determining the quality of care given the AIDS patient.

In conclusion the strong support for AIDS education across all groups is important. The chief implication of these data is that for both introductory and senior levels of nurse education, as well as among experienced R.N.s, AIDS education should form a part of university nursing programs and of health care institution staff education programs. This is all consistent with the opinion of nearly all respondents that nurses have an important role to play in public education regarding AIDS.

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RÉSUMÉ

SIDA: connaissances et opinions d'étudiants en sciences infirmières

Des échantillons d'étudiants débutants ou avancés en sciences infirmières ainsi qu'un échantillon d'infirmières et d'infirmiers d'expérience ont répondu à un questionnaire visant à cerner leur connaissance du sida. On a également tenté de leur faire préciser leurs opinions sur la prestation des soins infirmiers, les aspects psychosociaux du sida et la formation à ce chapitre.

Le niveau de connaissances fondamentales sur le sida et sa transmission est élevé, malgré des lacunes dans certains domaines. Des minorités significatives ont manifesté des attitudes au sujet du sida et de questions connexes ainsi qu'au sujet des soins à dispenser aux sidatiques qui pourraient être le reflet de craintes irrationnelles. Pour la plupart, les sujets interrogés appuient fortement l'adoption d'une formation spéciale dispensée dans le cadre des programmes de sciences infirmières ainsi que la mise en place de programmes de formation du personnel dans les établissements hospitaliers; la majorité était également d'avis que les infirmiers et infirmières ont un rôle important à jouer dans l'éducation du public.