Occupational Therapy Personnel and AIDS: Attitudes, Knowledge, and Fears

Ben J. Atchison, Betty J. Beard, Lula B. Lester

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This study explored the attitudes, knowledge, and fears of occupational therapists and certified occupational therapy assistants regarding AIDS and HIV. The 119 respondents' scores related to knowledge and fear revealed that many had significant fears about AIDS, which in turn may inhibit their willingness to care for persons with AIDS. The respondents also indicated a need for specific information about the condition, including current research data and information on infection control.

Although the general health care literature on AIDS and HIV has increased greatly in the last 5 years, the occupational therapy literature has only recently addressed the disease (Bonck, 1987; Denton, 1987; Giles & Allen, 1987; Gordon, 1987; Marcil, 1987; Person-Karell, 1987; Pizzi, 1988). In 1986, the Physical Disabilities Special Interest Section of the American Occupational Therapy Association made the first national presentation on AIDS to occupational therapists (Denton, 1986). Since then, our profession has begun to examine the effect of AIDS on our practice, as noted by a gradual increase of announcements in the American Journal of Occupational Therapy, OT News, and OT Week about conferences and workshops devoted to this topic. This special edition of the American Journal of Occupational Therapy demonstrates the urgency of addressing the many issues relevant to occupational therapy and AIDS.

Because of this increased interest in and concern about AIDS and its potential effect on occupational therapy, we must begin to evaluate the needs of occupational therapy practitioners regarding the provision of services. Denton (1987) noted that the treatment of patients with AIDS does not necessitate changes in established occupational therapy practices and principles. Pizzi (1988) suggested that occupational therapists examine the profession's roots in 19th-century Moral Treatment as a guideline for caring for persons with AIDS. He also emphasized the importance of the use of a theoretical framework to validate our therapeutic approaches.

The literature is replete with information regarding other health care workers' responses to the AIDS crisis. A careful evaluation of occupational therapy practitioners' readiness to respond to the increasing referrals of AIDS patients is vital. An assessment of occupational therapy personnel's attitudes, knowledge, and fears of AIDS should provide valuable information for the development of action plans for occupational therapy programs. This study attempted to collect such information.

The following questions were addressed:

1. What are occupational therapy personnel's fears and attitudes regarding AIDS?
2. Is there a relationship between knowledge and fear in caring for a patient with AIDS?
3. What do occupational therapy personnel want to know about AIDS?

Literature Review

Although studies generally indicate that the risk of HIV transmission to health care workers in the occupational setting is low (Centers for Disease Control,
or a single exposure to blood on the skin or mucous membrane has been documented (Centers for Disease Control, 1987; Stricoff & Morse, 1986). Experts disagree about the risks AIDS poses for health care workers (Goldman, 1988). Now that HIV has become more prevalent, occupational therapy personnel may be concerned for their own safety in the work setting.

Giles and Allen (1987) reviewed the precautions necessary for the protection of the occupational therapist working with an HIV-infected patient as well as the precautions necessary for the protection of the immunocompromised patient. They also elaborated on the importance of providing appropriate psychological support and an accepting environment for patients with AIDS or AIDS-related complex. Person-Karell (1987) documented the importance of the occupational therapist’s role in caring for persons with AIDS and acknowledged that occupational therapists must face their own beliefs, attitudes, and fears related to the disease process and death. No studies assessed the knowledge, attitudes, or fears of the occupational therapist regarding AIDS.

Both the media and the professional literature have documented health care workers’ inaccurate knowledge of AIDS, along with their anxiety, fear, homophobia, social stigmatization, and suboptimal care of persons with the disease (Barrett-Connor, 1984; Lester & Beard, 1988; Lewis, Freeman, & Corey, 1987). A study of physicians by Kelly, St. Lawrence, Smith, Hood, and Cook (1987) and a similar study of nurses by the same authors (Kelly, St. Lawrence, Hood, Smith, & Cook, 1988) found that both groups responded much more negatively to a patient identified as having AIDS than to an identically described patient identified as having leukemia. Katz et al. (1987) found analogous results. In a study of nurses by Reed, Wise, and Mann (1984), 80% of the respondents reported that they had at least some fear of caring for AIDS patients and that their family members were also anxious about their working with AIDS patients. Other studies of nurses in various settings noted that they expressed high fear and were reluctant to provide care to AIDS patients despite their knowledge that AIDS is not transmitted by casual contact (Lester & Beard, 1988; Prince, Beard, Ivey, & Lester, 1988; Rosse, 1985).

A study by Blumenfeld, Smith, Milazzo, Seropian, & Wormser (1987) found greater fear among nurses employed in such clinical settings as intensive care units, where patients are usually more acutely ill; they suggested that fear may be reduced through education. Valenti and Anarella (1984) surveyed a wide range of hospital employees and found that those scoring higher on the knowledge portion of their questionnaire were more likely to report no concerns about AIDS. Despite the fact that most of the respondents knew that casual contact does not pose a risk of the disease, 72% reported that they were concerned about acquiring AIDS from a patient with AIDS.

In a survey of physicians and nurses, 32% of the respondents agreed with the statement that hospitalized patients with AIDS receive inferior care compared with patients with other illnesses, and 30% of the respondents agreed that they felt more negative about homosexuality since the outbreak of AIDS (Douglas, Kalman, & Kalman, 1985).

The literature shows that fears and concerns among health care workers are prevalent, but such fears and concerns among occupational therapy personnel in particular have not been documented.

Method

Subjects

The sample consisted of 119 occupational therapy personnel (occupational therapists and certified occupational therapy assistants) from 13 health care facilities in both suburban and urban areas in the Midwest. The subjects worked in such settings as acute care, inpatient and outpatient rehabilitation, psychiatric care, school-based programs, and home health care agencies. Participation in the mailed survey was voluntary, and anonymity was assured.

Instrument

The questionnaire used in the study was a revision of an instrument previously used to assess nursing students’ and perinatal nurses’ attitudes and knowledge regarding AIDS (Lester & Beard, 1988; Prince et al., 1988). Questions were added, deleted, or modified to reflect current knowledge about AIDS as of May 1988 and to incorporate information more specific to occupational therapy personnel. In addition to the 11 demographic questions, there were 22 questions on attitude variables and two open-ended questions.

Data Analysis

A data analysis was conducted with the Statistical Package for the Social Sciences (SPSS-X) (1986). A significance level of $p = .01$ was selected for this study. Frequencies were done for all variables, and a knowledge score was computed. Pearson correlation coefficients were calculated to determine the relationship between background, knowledge, and attitude variables and self-reported fear scores. Additionally, $t$ tests were used to determine differences in mean scores for fear based on respondents’ attendance at conferences and workshops on AIDS.
Table 1
Survey Respondents' Fears About AIDS

<table>
<thead>
<tr>
<th>Question</th>
<th>Responses (%)</th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I am afraid that I might contract AIDS in the routine care of a patient</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>AIDS.</td>
<td>7</td>
<td>29</td>
<td>27</td>
<td>27</td>
<td>10</td>
</tr>
<tr>
<td>I would fear carrying the AIDS virus home to my children, relatives,</td>
<td>9</td>
<td>27</td>
<td>27</td>
<td>29</td>
<td>8</td>
</tr>
<tr>
<td>or friends if I cared for an AIDS patient.</td>
<td>13</td>
<td>28</td>
<td>22</td>
<td>33</td>
<td>4</td>
</tr>
<tr>
<td>I have more fear of AIDS than of any other disease.</td>
<td>8</td>
<td>17</td>
<td>21</td>
<td>42</td>
<td>12</td>
</tr>
<tr>
<td>I am afraid that my friends and family may avoid me if they know that</td>
<td>1</td>
<td>25</td>
<td>20</td>
<td>43</td>
<td>11</td>
</tr>
<tr>
<td>I am caring for an AIDS patient.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In my day-to-day activities, I feel that I may be exposing myself to</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>HIV.</td>
<td></td>
<td></td>
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</tbody>
</table>

Table 2
Survey Respondents' Attitudes About AIDS

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIDS patients are entitled to the same care as any other patient.</td>
<td>45</td>
<td>41</td>
<td>12</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>I would be willing to care for an AIDS patient.</td>
<td>8</td>
<td>43</td>
<td>43</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>I would volunteer to care for an AIDS patient.</td>
<td>5</td>
<td>16</td>
<td>41</td>
<td>22</td>
<td>16</td>
</tr>
<tr>
<td>I would quit my job rather than care for an AIDS patient.</td>
<td>0</td>
<td>1</td>
<td>10</td>
<td>51</td>
<td>38</td>
</tr>
<tr>
<td>All health care workers should be tested for the presence of the HIV</td>
<td>17</td>
<td>28</td>
<td>24</td>
<td>27</td>
<td>4</td>
</tr>
<tr>
<td>antibody.</td>
<td>59</td>
<td>56</td>
<td>2</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>All health care workers should be informed that a patient is HIV-positive.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>An occupational therapist should be fired if she or he refuses to care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>for an HIV-positive patient.</td>
<td>0</td>
<td>7</td>
<td>22</td>
<td>48</td>
<td>23</td>
</tr>
</tbody>
</table>

Results

Demographics

Of those who responded, the primary areas of practice were adult physical disabilities (64%), pediatric physical disabilities (10%), adult psychiatry (10%), pediatric psychiatry (3%), more than one (2%), and other (5%).

Of the 119 survey respondents, 108 (91%) were women. The ages of the subjects ranged from 22 years to 60 years ($M = 32.9$ years). Of those who responded to the question related to highest degree held, 10% held associate's degrees; 73%, bachelor's degrees; and 14%, master's degrees. Total years of experience in occupational therapy ranged from 1 to 20 ($M = 6.8$).

Fifty-five percent of the respondents reported having attended conferences or in-service programs on AIDS, 20% reported having had a social acquaintance with someone with AIDS or HIV infection, and 45% had cared for an AIDS- or HIV-infected patient.

The replies varied on the five questions addressing fear (see Table 1). Neutral answers (i.e., neither agreement nor disagreement) for all five questions on fear ranged from 20% to 27%. Thirty-six percent were afraid that they would contract AIDS in the routine care of a patient with AIDS; 36% feared carrying the AIDS virus home to their family and friends; 41% feared AIDS more than any other disease; 54% were not afraid that their family and friends would avoid them if they knew they were caring for AIDS patients; and 54% felt that they were not exposing themselves to AIDS in their daily job activities.

Ninety-six subjects responded to the open-ended statement, "My greatest fear about AIDS in my work setting is...." The most frequent concerns elicited were (a) fear of not knowing if a patient has AIDS or HIV ($n = 36$), (b) fear of contracting the disease ($n = 25$), and (c) fear of their own failure to take the necessary precautions to protect themselves and their patients ($n = 17$).

Attitudes

As shown in Table 2, 86% of the respondents agreed or strongly agreed that AIDS patients are entitled to the same care as other patients. Fifty-one percent were willing to care for an AIDS patient, and 43%
were undecided about their willingness to care. Only 21% would volunteer to care for an AIDS patient, and 41% were undecided.

Most of the respondents (89%) would not quit their jobs if required to care for an AIDS patient; however, only 7% felt that an occupational therapist should be fired for refusing to care for an AIDS patient. Eighty-five percent felt that all health care workers should be informed if a patient is HIV-positive. Forty-five percent felt that health care workers should be tested for the presence of the HIV antibody.

There was a strong relationship between occupational therapists who were willing to care for AIDS patients and those who would volunteer to care for such patients (r = .58, p < .001). No correlation was found between knowledge of AIDS and willingness to care or volunteering to care for an AIDS patient. A positive relationship was found between experience in caring for an AIDS patient and both volunteering to care (r = .31, p < .001) and willingness to care (r = .54, p < .001).

**Relationship Between Knowledge and Fear**

Seventy-seven percent of the respondents answered 5 to 9 of the 11 knowledge questions correctly. The number of correct answers ranged from 1 to 9, with a distribution of 5, 6, or 7 correct. The use of a non-forced-choice format reduced the guess factor. The don't know response for individual questions ranged from 10% to 47%. For example, 47% did not know that newborn infants who initially test HIV-positive may, over time, test HIV-negative.

The primary sources of information were the media (45%) and a combination of hospital in-services, professional conferences, and classroom instruction (23%). Thirteen percent stated that their chief source of information was health-related journals.

No correlation was found between knowledge scores and self-reported fear scores. The results of the t tests showed no differences between the self-reported fear scores for those who attended conferences and workshops and those who did not.

**Knowledge Sought**

Seventy-nine respondents completed the open-ended question, "What information would you like regarding AIDS?" The most frequent responses included (a) need for information updates (n = 29), (b) need for current factual information about the transmission of the disease (n = 11), and (c) need for specific precautions that health care workers should take to protect themselves and the patient with AIDS (n = 9).

Many respondents were concerned with the uncertainty that they perceived exists about AIDS. This uncertainty was conveyed through comments indicating that the information given to the public is often contradictory and incomplete. Some respondents expressed the need for institutions to provide therapists with specific precautionary procedures related to training AIDS patients in activities of daily living, particularly such self-care tasks as bathing, toileting, and feeding. Concerns about the treatment of people with open wounds were shared as well.

**Discussion**

Although the participants varied in their overall responses to the fear statements, there was a high percentage of neutral answers. Such neutrality suggests that these respondents were unsure about their fears related to AIDS and indicates a need for continuing dialogue about the disease. That the majority of respondents chose to answer the open-ended statements about specific fears in their work setting demonstrated their need to share their personal fears.

Many respondents expressed a fear of not knowing if a patient has AIDS or HIV, as evidenced by their responses to the question, "What information would you like regarding AIDS?" Their concern was validated by the large number of respondents who felt that all health care workers should be informed that a patient is infected with HIV. Although institutions have policies to maintain patient confidentiality, it is nevertheless important that administrators recognize that AIDS is of concern to occupational therapy personnel.

The respondents in this study clearly possessed compassion toward the person with AIDS—Many felt that AIDS patients are entitled to the same care as any other patient. A large number of respondents, however, were unwilling or were undecided about their willingness to care for this population, thus demonstrating a discrepancy between idealistic beliefs about the care of patients and actual practice. This also implies a lack of readiness among occupational therapy personnel to respond to the AIDS crisis. The significant relationship between those who have treated AIDS patients and those who are subsequently willing to volunteer suggests that experience helps to alleviate inaction.

The finding that most respondents obtained their information from popular media sources is of concern. If the most objective and current research is to be used to mollify fears and clarify misconceptions, then occupational therapists must consult scientific sources. The high frequency of comments directed toward a need to update information demonstrates the need for education about the most appropriate and useful information on AIDS.
Study Limitations
This study was restricted to a small convenience sample of self-selected occupational therapists and occupational therapy assistants in the Midwest. The results, therefore, cannot be generalized beyond the geographical area.

Another limitation involves the questions on AIDS knowledge. Knowledge about this disease changes daily, and what was believed to be true several months ago may no longer be accurate today. Therefore, this study should be viewed as a cross section of what was known about AIDS as of May 1988, the time at which the survey was completed. Further, as with any self-report, the respondents may have conveyed attitudes that they felt were acceptable to the researcher.

Implications for Practice
We were surprised that 45% of the respondents reported that they had cared for an AIDS or HIV-infected patient. This indicates that the AIDS epidemic has come to involve the services of occupational therapy practitioners. Although inferences regarding occupational therapy personnel's attitudes, knowledge, and fears about AIDS are limited due to the specific geographical area represented by this sample, a clear plan of action by which occupational therapy programs can address the AIDS crisis is, nonetheless, imperative. As the AIDS epidemic grows, increasing numbers of health care professionals are recognizing the need to learn more about AIDS and to realize the psychosocial effects of the disease.

How do we best educate occupational therapy personnel to respond to the AIDS crisis? Although the provision of occupational therapy services to AIDS patients warrants no immediate changes, a change in the procedure of care is essential. Universal precautions related to blood and body fluids must be practiced by all health care workers. This might necessitate the prompt integration of principles of infection control, asepsis, and microbiology into occupational therapy curricula and the inclusion of this information in continuing education courses.

No evidence exists that supports the sufficiency of a one-time-only staff education course. Occupational therapy practitioners need to be updated about AIDS continually (e.g., transmission and epidemiology, research findings, practice trends).

Several professional publications, including the Journal of the American Medical Association, the New England Journal of Medicine, and the Centers for Disease Control's Morbidity and Mortality Weekly Reports, provide current information on AIDS, but not all occupational therapy personnel have access to them. Regular features in the occupational therapy literature that address critical knowledge about AIDS would be more accessible.

Whether increased knowledge about AIDS lessens fear of the disease and increases willingness to care for AIDS patients is unclear. Further continuing education courses, therefore, might include opportunities for occupational therapists and occupational therapy assistants to share their fears. The use of a multidisciplinary team (e.g., social workers, nurses, pastoral counselors, infection control workers) would benefit small-group discussions.

Occupational therapy personnel need time to practice infection control procedures, for example, dressing changes and equipment sterilization. Role modeling by individuals experienced in the care of persons with AIDS has been used successfully in nursing to lessen fears and to teach these skills effectively. This approach may work well with occupational therapy staff.

In addition, institutions need to rethink their position regarding patient confidentiality. Universal precautions are useful in protecting the health care worker. A patient with a compromised immune system, however, is at increased risk of infection from health care personnel who are unaware of the patient's immune status.

Implications for Research
Although this study provided insights regarding the attitudes of occupational therapy personnel about AIDS, some of the concerns raised warrant further investigation. The generalizability of the present findings must be determined through random sampling across geographical regions. Variables such as beliefs and attitudes about homosexuality need further examination, because the research suggests that some health care workers have ambivalent feelings about caring for homosexual persons with AIDS (Douglas et al., 1985; Lester & Beard, 1988).

Activities for increasing occupational therapy personnel's sensitivity to the needs of AIDS patients must be developed, implemented, and evaluated. Coping strategies to help occupational therapy personnel care for patients with AIDS must be developed. Finally, case studies that document how occupational therapy personnel work with AIDS patients, their families, and significant others need to be disseminated.

References


