The University of Chicago
Graduate School of Business
Center for Health Administration Studies (CHAS)
1101 East 58th Street, Walker 111
Chicago, Illinois 60637
(312) 702-7104

WORKSHOP IN HEALTH ADMINISTRATION STUDIES

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Herbert M. Hazelkorn, D.D.S., Ph.D.
Director of Program in Dental Public Health
School of Public Health
University of Illinois at Chicago
Chicago, Illinois

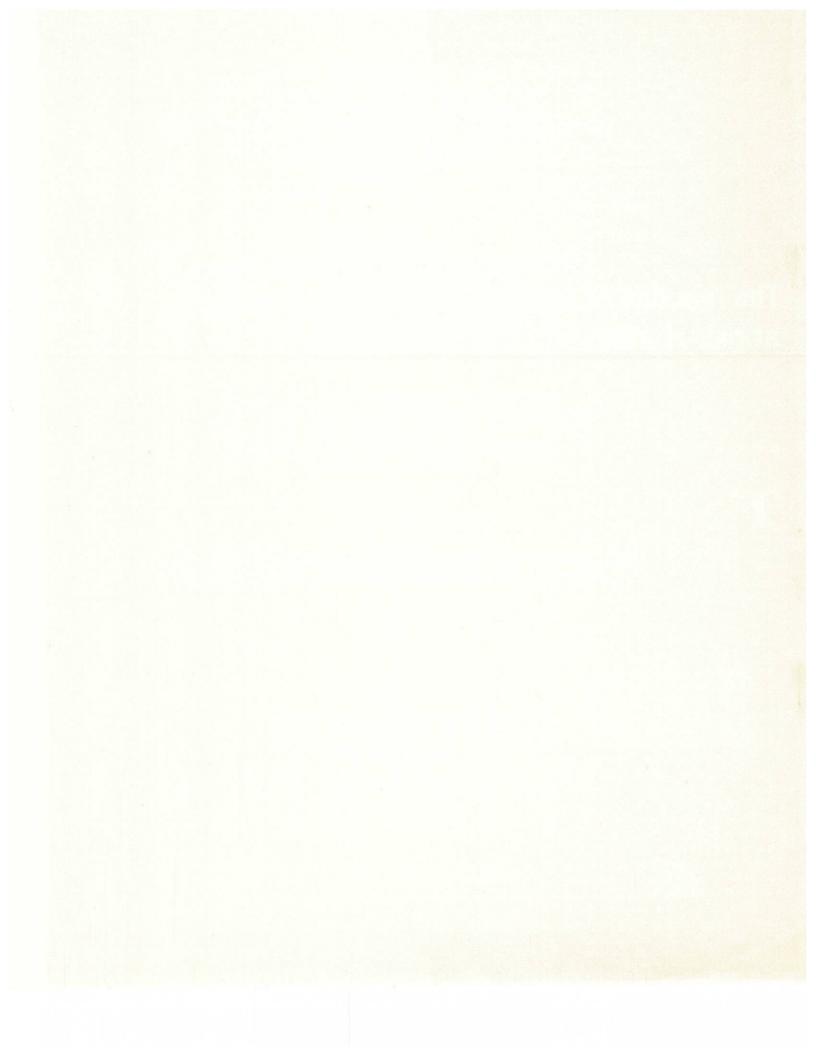
"The Responsible Use of Human Subjects in Research-Dentists' Reactions to Treating AIDS Patients"

for

Thursday, April 26, 1990

Rosenwald 405

3:30 - 5:00 p.m.



ARTICLES

An experimental field study examined dentists' attitudes and actual behaviors toward men who belong to groups at great risk of AIDS. A total of 102 randomly selected dentists were uninformed subjects who examined an actor in need of dental care and who played three roles as a patient: one who is heterosexual, homosexual, and an intravenous drug user. After each examination, the actor/patient completed a questionnaire about his experience and the dentists were interviewed about homosexuality and AIDS. The dentists were then debriefed and told that they were part of an experiment. Despite negative feelings toward homosexuality, only one dentist refused to treat the actor when he was perceived to be homosexual. One dentist also rejected him when he played the part of an intravenous drug user.

The reaction of dentists to members of groups at risk of AIDS

Herbert M. Hazelkorn, DDS, PhD

his study used actual observations in dental offices to determine whether dentists discriminate against men who belong to groups that are known to be at great risk of acquired immune deficiency syndrome (AIDS). During the past few years, many stories of discrimination by health care workers against patients with AIDS or against patients who are homosexual (who may or may not have AIDS) were reported. On July 19, 1987, the Chicago Sun-Times reported that only three dentists of more than 4,500 who practice in the Chicago area would treat men who have AIDS or who are infected with the human immunodeficiency virus (HIV).1

The story about the insensitivity of Chicago dentists spread rapidly across the country, creating a poor impression of dentists in general, and Chicago dentists in particular. The newspaper article would have been more complete if it had also reported that many physicians and other health care workers had also publicly stated that they would not treat persons with AIDS²⁻⁵; and that the three Chicago dentists who said they do treat or would be willing to treat patients with AIDS happened to be the only three who had

become known to the director of the Chicago Dental Society. The actual number of dentists who would treat patients with AIDS or persons at great risk of AIDS is not known. Whether dentists reject patients who are HIV-positive or who have AIDS is also not known. Nor is it known, even if those persons are rejected, whether that rejection is based on fear of AIDS, or if it occurs for other reasons.

The New York City Commission on Human Rights, having received more than 750 reported incidents of AIDS-related discrimination as of 1987, believes that health care professionals reject patients with AIDS, discriminate against persons who are homosexual, and discriminate against men who merely look "gay."6 It is difficult to verify discrimination against persons who are homosexual in health professionals' offices because these studies are generally either retrospective reports by persons who are homosexual or responses by health care professionals to hypothetical questions, possibly providing answers they believe they should give or that the investigator would like to hear. Perhaps dentists and other health care providers claim that when they refuse to treat patients with AIDS it is not because they discriminate against people who are from high-risk groups, but because they do not want to risk being infected with the virus or spread it to their families, staff members, or other patients. There have also been reports^{2,7} that dentists contend that if it became publicly known that persons with AIDS had been in their offices, many of their other patients, fearing contamination, would leave their practices.

With the history of discrimination and oppression against people who are homosexual,8 it may be difficult to obtain nonbiased reports from people who are homosexual to questions about the public's reactions to persons who are homosexual. This is especially true if those persons have experienced some form of discrimination personally. Therefore, some reports about discrimination by health care professionals from those who are homosexual are biased. There have not been enough studies to produce sufficient data from empirical research documenting discrimination by health care workers against patients who are homosexual.

This research addresses the issue of discrimination. Whether dentists discrim-

inate against patients who are homosexual—refusing to treat or to accept them as patients—and whether they use the fear of AIDS to "excuse" their actions is studied. Additionally, whether persons who are homosexual are refused treatment more often than the other well-known high-risk group, intravenous drug users, is examined.

If dentists, for any reason, actually discriminate against persons who are homosexual, there may be a lack of necessary treatment for millions of persons who are homosexual. Many persons who are heterosexual view all persons who are homosexual as being sexually promiscuous, yet individuals who are homosexual may be no more promiscuous than individuals who are heterosexual, and no more at risk of AIDS than persons who are heterosexual. Thus, refusing to treat persons who are homosexual is patently unethical. Silverman9 found oral lesions in 53% of patients with Kaposi's sarcoma (KS) and, ". . . in some patients, this was the first sign of AIDS." Therefore, if discrimination does occur, early detection and treatment of patients with AIDS or with oral signs of KS is delayed.

There is also concern that the fear that they might be discriminated against may influence some patients who are homosexual who have AIDS or who are HIV positive to withhold that information from their doctors, thus increasing the potential risk of transmission to health care providers.

This research studied how dentists actually act in the secure environments of their offices, rather than how they retrospectively say they have acted or usually act. In an earlier study, 10 when hotel managers and restaurateurs were unknowingly placed in a "real life" situation, they did not discriminate against a minority group as they had previously reported that they would in a survey questionnaire.

To better understand how health care workers act toward persons with or at risk of AIDS, the attitudes and behavior of these professionals were examined using the dental practitioner as an example. The subject of homophobia (the irrational fear of homosexuality or of people who are homosexual) is discussed; and a prospective experiment that investigated whether discrimination actually occurs in dentists' offices are described. Finally, on the basis of the results of the study, some conclusions are drawn about the attitudes and behavior of dentists in the practice of their profession, which may be applicable to other health care providers.

Background

Some historians compare the public response to AIDS with the reaction to the bubonic plague during the Middle Ages. Brandt¹¹ believes that "not since the polio epidemics of the 1950s has fear of infection reached such a high pitch as it has in the 1980s." US Surgeon General Koop¹² tried to calm an apprehensive public by repeating again and again that the AIDS virus is not easily passed from one person to another. Krim¹³ reinforced Koop's efforts, stating that "we can confidently say that (AIDS) is not transmitted by casual contact."

Despite all the evidence, much of the public has been caught up in the fear hysteria. In 1987, the administrator of Cook County Hospital in Chicago announced that one of the hospital's staff physicians who had AIDS would not be permitted to do "invasive" procedures for patients.14 With this one action, the administrator suggested to the public that HIV is easily transferred from doctor to patient, and logically from patient to doctor, as well as from person to person. Fineberg¹⁵ argues that all the information the public receives through the media may be confusing them. He wrote that "the feeling conveyed to the public from

On the other hand, dentists hear the warnings that continually urge them to protect themselves thoroughly from AIDS, and to use utmost caution with all patients as they cannot know who might be HIV positive. Dentists might ask, "if there is so little to worry about, why must we be so very cautious?" In actuality, there is only a little to worry about if they are cautious.

Dentists feel insecure because by the nature of the profession they work within a body cavity where tissues are normally very vascular and friable. Even when routinely examining a patient, dentists are required to have their fingers well within the mouth to feel the texture of the soft tissue and to determine mobility of the teeth. Thus, barring a physician with AIDS from "invading" patients to prevent transmitting the AIDS virus¹⁴ easily reinforces negative attitudes toward patients with AIDS and makes dentists' uneasiness slightly more understandable.

Despite all affirmations of safety, reports show that health care providers loather going near patients who have AIDS or are known HIV carriers. Gerbert² found that three-quarters of her random sample of California dentists are reluctant to care for patients with AIDS, and 63% do not want to accept those who are in high-risk groups

Dentists have changed in the way they feel toward patients with AIDS, although some of that change is age related.

responsible officials about AIDS in fact is ambivalent, both reassuring and alarming."

Fineberg¹⁵ also said that "to the physician or epidemiologist . . . the dual message is eminently sensible." The evidence, however, is actually not clear as to whether health care professionals understand the dual messages. On the one hand, they repeatedly hear that health care workers really have little to worry about16-25; that the low risk of occupationally acquiring AIDS has been well documented18-21,26,27; that even after a needlestick type of injury, it is rare for seroconversion to occur; that "the level of risk associated with exposure of mucous membrane or nonintact skin is far less"28; and that "denying anyone with AIDS any medical or dental service is the worst kind of nonsense."12

as patients. Thompson's⁴ poll of approximately 350 dentists in Manhattan found that "100% of them would not treat a patient with AIDS."

Dentists have changed in the way they feel toward patients with AIDS, although some of that change is age related. Verrusio and his colleagues29 found that of the dentists they questioned in a national survey in 1988, 36% of those younger than 35 said they would be willing to treat patients with AIDS, while only 24% of those older than 65 said they would be willing to treat them. Also related to age is the number of dentists who are using barriers to protect against infection. Eighty-nine percent of dentists younger than 35, but only 45% of dentists 65 years and older, said they wear gloves with all patients.29

Gerbert,2 however, found that many

dentists and hygienists still work unprotected. Her data show that because only 33% of her sample of dentists did not screen for AIDS, and about half of those who responded to her survey questionnaire said that they do a thorough examination for signs of AIDS-related conditions, she believes dentists may not even fully know "who their patients are." But if the 50% who do a thorough examination for signs of AIDS or AIDS-related conditions do not take a thorough history as well, they cannot know that the patient could be a member of a high-risk group (patients with hemophilia, or users of intravenous drugs, or patients who are homosexual) and might be infectious.

Behavioral evidence, thus, might indicate that dentists' fear of contamination by AIDS is less than stated. Two questions that might be asked are: if dentists are afraid of AIDS, why don't more of them wear gloves more often; and are dentists' actions toward patients with AIDS motivated by another factor, that is, discrimination against persons who are homosexual and not against persons who have AIDS?

Homophobia

Health care professionals, as well as persons in many professions, find certain persons undesirable. Papper³⁰ developed a long list of "undesirable" patient characteristics, extending from the aged in a teaching hospital in which the staff tends to be young, to the physically dirty, uneducated and poor, and those whose race, religion, or country of origin may be different from that of the practitioner's. Under ordinary conditions, considering dentistry today rarely involves a lifethreatening situation, a dentist can refuse to treat someone he or she considers "disagreeable." Discrimination, however, may denote distinguishing between persons categorically rather than individually, so that an individual who belongs to a stigmatized group³¹ becomes unacceptable.

During the past two decades, persons who are homosexual, environmentalists, political conservatives, and anti-abortion groups have "taken to the streets" to publicize their point of view. Many in society, however, are disturbed when they see persons who are homosexual marching and demonstrating in public. The subject of sexual behavior, especially sexual behaviors practiced in a manner different from that of the majority, has intimidated and frightened many societies for several

Table 1 ■ Number of subject-dentists, according to gender and age grouping, who examined actor-patient when he played three different parts (N = 90).

(Demographics)				
Dentists who examined actor	Homosexual	Intravenous drug user	Heterosexual	
Gender				
Male	30	23	27	
Female	2	4	4	
Age				
Age <35	6	4	11	
35-55	20	15	16	
>55	6	8	4	

millennia. Thus, those who engage in what "normal" society believes are deviant sexual practices, have been seen as threats to society's cultural base and traditional family values. Even today, despite many changes in social mores, unorthodox sexual practices provide a sufficient threat to secular authority so that persons who are homosexual are still dishonorably discharged from government service or the military ranks.³²

The media frequently reflect what might be a subliminal bias against homosexuality when reporting about AIDS. Their news stories relating to persons who are homosexual often discuss sexual practices that transmit HIV, but rarely describe the public's feeling against persons who are homosexual or the discrimination against persons who are homosexual who have AIDS. However, when children contract AIDS from blood transfusions, they often become the topic of sympathetic headline news stories. 33,34

Conrad and Schneider³⁵ maintain that "whatever else (homosexuality) may be, . . . it is considered 'wrong' or 'deviant' by a sizable proportion of the population." Society's labeling of homosexuals as deviants may be more deeply internalized in our thinking than many would probably care to admit. Conrad and Schneider35 believe that despite his nonjudgmental "spirit" toward persons who are homosexual, Kinsey might have flawed his conclusions, occasionally displaying his preferences for heterosexuality. In addition, persons who are heterosexual, who have no biases toward persons who are homosexual, might fear that the friends and family will think they are "gay" when they treat persons who are homosexual as they would any other person.

The experiment

This research sought to learn how dentists

really behave in their offices toward persons who are homosexual and if their behavior is consistent with their attitudes. If dentists discriminate against patients solely on the basis of perceived homosexuality, they would have inappropriate behavior or would refuse to treat a person who seemed to be homosexual but they would behave in a considerate manner and treat that same person if they perceived him to be heterosexual or an intravenous drug user. If dentists are afraid of contracting AIDS and reject patients who might transmit the disease, they would refuse to treat anyone they perceived to be a member of a high-risk group (patients who are homosexual or are intravenous drug users) but they would treat him if they perceived him to be heterosexual. If dentists do not discriminate against persons who are homosexual or if they do not fear contracting HIV through doctor-patient contact, they would treat anyone who comes to their offices whether they perceived them to be homosexual, bisexual, heterosexual, or intravenous drug users.

The research design used in this study was successfully used in a previous experiment on dental benefit plans.36 Both that study and this study were approved by the University Institutional Review Board³⁷ and the US Department of Health and Human Services Office for Protection from Research Risks.38 Both were approved because they were considered surveys in which no one was at risk of being harmed, the dentists were debriefed within a short time, they were paid for their services, and their anonymity was completely assured. Additionally, because no treatment was performed, the patient was not at risk.

The following null hypotheses were tested:

—There is no difference in the percentage of men obviously in need of dental care who are perceived to be homosexual (or intravenous drug users) and are refused treatment by dentists, from the percentage of men obviously in need of dental care who are perceived to be heterosexual and are refused treatment by dentists.

—There is no difference in the percentage of men obviously in need of dental care who are perceived to be homosexual (or intravenous drug users) and are given an initial examination by the dentist but are refused further appointments, from men obviously in need of dental care who are perceived to be heterosexual and are given an initial examination but are refused further appointments by dentists.

In addition, the study also investigated the response of dentists to a survey questionnaire about their attitudes toward persons who are homosexual.

Methods

Data were collected in a two-stage process. In the first stage, dentists were subjects and a professional actor was the "treatment factor" in a prospective field test of actual practice conditions. The actor posed as a patient, portraying three roles (a person who is homosexual, a person who is heterosexual, and a person who is an intravenous drug user) and systematically manipulated the independent variables to temporarily deceive the uninformed dentist-subjects. The second stage was a face-to-face survey questionnaire conducted after each dentist-subject completed his or her examination of the actor-patient, and the actor had left the office. The survey provided information on dentists' attitudes toward persons who are homosexual, homosexuality, and toward patients who are HIV positive or who have AIDS. It also provided information about what the dentists say is their usual behavior toward those patients.

The treatment factor

A professional actor was used as a patient because he is trained to play different roles, and to play those same roles over and over again. He was interviewed and examined by the dentist with a mouth mirror and explorer, and full-mouth and bite-wing radiographs were taken to determine his need for dental treatment and his suitability as a patient in the research. The actor had numerous carious teeth but they were asymptomatic and remained so during the study. The radiographs were given to him to bring to each dentist-subject.

The actor was coached by a director of

Table 2 Awareness of the dentist to the research (N = 90).

Were you aware at any time, when he was in your office, that the actor-patient was part of a research project?

	(No.)	(%)
Yes	1	1.1
No	89	98.9

Number of subject-dentists answering survey questionnaire who perceived actor-patient to be what he portrayed.

1. How did you feel about the actor-patient? Do you believe he is homosexual? (Asked when dentist saw patient portraying a homosexual man.)

Portrayal of actor	Yes	No	Not sure
When actor-patient played the part of	24	1	7
patient who is homosexual			

2. How did you feel about the actor-patient? Do you believe he is an intravenous drug user? (Asked when dentist saw patient portraying role of an intravenous drug user.)

Portrayal of actor	Yes	No	Not sure
When actor-patient played the part of	18	4	1
an intravenous drug user			

Table 3 Dentists' willingness to treat actor-patient (N = 102).

		Yes	No	%
Homosexual	N = 34	34	0	100
Intravenous drug user	N = 35	34	1	97.1
Heterosexual	N = 33	33	0	100
		101		99.0
Totals To make additional app	ointments when pa	ntient portrayed himse		
	ointments when pa		lf as:	%
	ointments when pa	ntient portrayed himse		
To make additional app Homosexual		ntient portrayed himse Yes	No	%
To make additional app	N = 34	ttient portrayed himse Yes 33	No	% 97.1

a professional theater group to prepare him to play the three parts so that the dentists would readily perceive him to be the character he was playing at that time.³⁹ The actor learned answers to fit all situations and questions that the dentist-subjects were expected to ask. Those answers and his actions were identical for all three roles except for specific differences that applied to each of the parts he played. The actor was rehearsed in his portrayals before the field study began and again at regular intervals throughout the course of the project to ensure that his acting remained the same.

To learn how society perceives the stereotypical male who is homosexual, numerous interviews were conducted with lesbian organizations and persons leading heterosexual lifestyles. The actual sexual preference of the actor was not a factor

in his selection for the study. The most important factors were good acting ability to play all three roles convincingly, and the need for extensive dental treatment.

When he played the part of a man who is homosexual, the 29-year-old actor wore a black satin shirt, a number of gold chains and rings, and said that he worked as a hairdresser. He gave the dentist his radiographs and said that they were "recently taken in San Francisco but no treatment was done. Nor did the dentist tell me what treatment was needed. I moved to Chicago because my roommate's mother is very sick and he wanted to be near her. The dentist's assistant sent me the X rays when I came to Chicago."

Persons involved in drug abuse programs provided advice to the actor in portraying a person who uses intravenous drugs. Although it was summer, he wore

a long-sleeved shirt with a short-sleeved shirt over it to give the impression that he might be hiding something. The actor said that he is the business manager of a rock music group. While completing the medical history questionnaire, he put a question mark adjacent to the question "Do you take any medication?" to provoke the dentist into asking about the question mark. The actor would then be able to tell the dentist that he uses drugs. If a dentist did not use a printed history questionnaire (actually all dentists did use this format) or did not ask about medication, the actor informed the dentist that "he does drugs." He gave his radiographs to the dentist and said that they were "recently taken in New York but no treatment was done. Nor did the dentist tell me what treatment was needed. I moved to Chicago because my roommate's mother is very sick and she wanted to be near her. The dentist's assistant sent me the X rays when I came to Chicago."

When he played the part of a man who is heterosexual, he wore a sport shirt and told the dentist that he was a salesman for a publishing company. He gave the dentist his radiographs and said that they were "recently taken in New York but no treatment was done. Nor did the dentist tell me what treatment was needed. I moved to Chicago because my roommate's mother is very sick and *she* wanted to be near her. The dentist's assistant sent me the X rays when I came to Chicago."

Chicago's history as a racially and ethnically divided city would make it unusual for a white person to seek treatment from a dentist in a black or Hispanic neighborhood, or for a black person to seek treatment from a dentist in some of Chicago's ethnic communities. Blacks were, therefore, excluded from participation in the study to avoid threats to validity that could occur if racial or ethnic discrimination confounded the hypothesis of the study that discrimination (if it occurs) is based on homophobia. Thus, a white actor was selected as the patient, dentists whose addresses were in black inner city areas were excluded from being subjects, and, coincidentally, no black dentists who had offices outside the inner city were in the random selection of subjects.

Study subjects

A group of 102 general practitioners were randomly selected from the total population of dentists licensed by the State of Illinois Department of Professional Regulation who practice in three counties of metropolitan Chicago. The dentists were then randomly assigned into three separate cohorts (the actor saw 34 dentists when he portrayed a homosexual man, 35 when he acted as if he used intravenous drugs, and 33 when he portrayed a heterosexual man). This large number of dentist-subjects in each cohort was used in an attempt to provide a statistically powerful result.

Study design

One person made all the appointments for the patient on the telephone, randomly selecting the dentists' telephone numbers from the roster of subjects. He acted as the patient and insisted on having only an examination at that first appointment to learn what treatment was needed. Taking the part of the patient, he said that he would bring his new radiographs with him (this was to avoid additional radiation exposure beyond what the patient had already received in his initial examination to determine his acceptability as a patient in the study), and that he did not want any more radiographs. He also said that he could afford to pay for any necessary treatment.

Because the first appointment was made by telephone, stereotypical physical characteristics generally assumed about men who are homosexual, and portrayed by the actor-patient when he was in the doctors' offices, were not yet apparent. In addition, the dentist had not heard the references the patient made about his male roommate, his job as a hairdresser, and his previous residence in San Francisco, which has a large homosexual community. Thus, until the patient came into their offices, the dentists were not able to tell that he "was gay."

After each examination, the patient paid in cash for the doctor's services and requested an additional appointment. This was to learn whether the dentist would do an initial examination for a patient perceived to be homosexual (or an intravenous drug user) but would then find a reason to refuse to treat him. The actor then left the office, waited outside for approximately 1 minute and returned to say: "You know, that's a lot of treatment. I think I should get a second opinion. May I have my X rays and I will call you when I am ready to begin treatment."

He left the dentist's office a second time and completed a questionnaire that asked about his experiences in that office. The principal investigator then entered and asked to interview the dentist either at that time, if convenient, or to make an appointment to do it at a later date. Ninety, or 88.2%, of the dentists who examined the patient were interviewed in a face-to-face survey. Receptionists for six of the 12 dentists who were not interviewed refused to allow the interviewer "past their desks" either in person or on the phone. The other six refused for reasons such as "I am too busy," "I don't do surveys," or as one dentist said, "I am superstitious. My

Do you feel uncomfortable when "gay rights da	ay" parades are shown on tele	evision?
	No.	%
Very uncomfortable	11	12.2
Slightly uncomfortable	29	32.2
Not at all uncomfortable	48	53.3
No opinion	2	2.2
Does it disturb you to see two men holding han	nds while walking in public i	n your hometown?
	No.	%
Very disturbed	22	24.4
Slightly disturbed	49	54.4
Not at all disturbed	19	21.1
No opinion	0	0
Ooes it disturb you to see two women holding l	hands while walking in publ	ic in your hometown?
	No.	%
Very disturbed	12	13.3
Slightly disturbed	38	42.2
Not at all disturbed	40	44.4
No opinion	0	0

ould you refer patients to a colleague w	hom you know is homosexual?	
	No.	%
Yes	64	71.1
No	23	25.6
Don't know	3	3.3
N = 90		
ould you refer patients to an oral surge	on whom you know is homosexual	?*
	No.	%
Yes	61	67.8
No	21	23.3
Don't know	3	3.3
N = 85		
ould you refer patients to a pediatric de	entist whom you know is homosexu	1al2*
	No.	%
Yes	56	62.2
No	25	27.8
Don't know	4	4.4
N = 85		
nould homosexuals be admitted into de	ntal school?	
	No.	%
Yes	74	82.2
No	14	15.6
Don't know	2	2.2
N = 90		

practice is going well and I don't want to do anything that might disturb it."

For those who agreed, the interviewer questioned them about their attitudes and behavior toward patients who are HIV positive or have AIDS as well as toward persons who are homosexual and toward homosexuality. The dentists were debriefed about the study. They were asked if they had been aware that the actor had been part of a research study, how they felt about being uninformed subjects, and if they actually thought the presumed patient was really homosexual or an intravenous drug user. No data are included about the treatment recommended by the dentist as that information was not relevant to the study and it would have been intrusive to record and retain it.

Data were collected in a relatively short time so that the actor-patient's existent dental disease did not cause him discomfort. His oral condition was also continually supervised to prevent it from becoming acute, painful, or untreatable.

The major dependent variables were analyzed to determine the number and percentage of dentists in each cohort who: responded in a particular manner to the questions in the postexamination survey questionnaire; and acted in a particular manner as recorded by the patient in the questionnaire he completed after each examination.

Pretest

A pretest was conducted with 15 dentists (the actor-patient portrayed the roles of a person who is homosexual, heterosexual, and an intravenous drug user five times each) selected from the same population as the full study. The pretest was done to learn: if the actor could perform the three different roles and be perceived by dentists and their office personnel either as heterosexual, homosexual, or a person who uses intravenous drugs; how the dentists and their office personnel responded, when debriefed, to being uninformed subjects in a research study; and if adjustments in the survey questionnaire were necessary.

Results

Table 1 describes the demographic characteristics of the subjects. The dentists were from all parts of metropolitan Chicago—north, south, southeast, and west; they had offices in the city and in the suburbs, in

downtown office buildings, in suburban homes, and in shopping centers; they were female and male, ranging in age from the late 20s to 83; they were in practice for less than 1 year to more than 60 years; and they represented many of the ethnic and national groups in Chicago. Most (55.6%) identified their practices as treating mostly middle class and none labeled them as treating primarily welfare patients. This was not surprising as inner city practices were excluded from the sample.

The percentage of women in the sample was similar to the percentage of women who are members of the Chicago Dental Society (CDS) (11.1% and 11.5%, respectively). The ages of the dentist-subjects were also similar to the members of the CDS. In each, slightly more than half were between the ages of 35 and 55; approximately a fourth were younger than 35, and a fourth were older than 55.

Table 2 reports whether the uninformed dentist-subjects knew that they were part of an experiment when they examined the actor-patient. One dentist, of the 90 who responded to the survey questionnaire, claimed that he knew the patient was not "real." Two other dentists discovered after they had examined the patient, but before they were interviewed in the face-to-face survey, that an experiment was taking place. Table 2 also shows how the dentists perceived the actor. To conclude that dentists do or do not discriminate, or that they fear treating patients who belong to groups that are at great risk of AIDS, it is necessary to know whether they perceived the patient to be homosexual or an intravenous drug user when he was in their offices. The number of respondents of the survey questionnaire in each group do not always add up to the total number of dentists who examined the patient within each group because: 12 dentists, not equally divided between the three cohorts, did not respond to the survey questionnaire; and some dentists who did respond to the questionnaire refused to answer certain questions.

A total of 75% of the dentists (of the 32 who saw the actor when he acted as a homosexual man) who responded to that question, believed him to be homosexual; 22% were not sure. One dentist said that he did not believe the actor was homosexual. Of the 23 who saw him when he acted as an intravenous drug user and who responded to that question, 78.3% believed him to be what he portrayed; four dentists (17.4%) did not believe his portrayal, and one was unsure.

The major dependent variables were the

number of dentists refusing to treat a patient they perceived to be homosexual or an intravenous drug user. Only one dentist refused to examine the patient. At that time, the actor played the part of an intravenous drug user. When the dentist discovered this fact, he asked the actor to leave (Table 3). Only one dentist refused to make a second appointment for the "gay" actor (Table 3). He perceived the patient to be homosexual, completed the examination, but then refused to make more appointments for him. This particular dentist's responses on the postexamination questionnaire indicated a negative attitude toward persons who are homosexual (Tables 4-6). (The cross reference was possible because both the actor-patient's questionnaire and the postexamination survey questionnaire were identified with the same number. The number, however, does not identify the dentist's name. None of the subjectdentists can be identified by either their name or a number. They are completely anonymous.) Thus, of the 69 dentists who saw the patient as a member of a group at great risk to AIDS, only two rejected him as a patient. None rejected him when he portrayed a heterosexual male.

On the subject of homophobia, in general, more than 44% of the dentistsubjects, in responding to the postexamination survey, said they were either very uncomfortable or slightly uncomfortable when "gay rights day" parades are shown on television (Table 4). Viewing persons who are homosexual on television, however, seems less disturbing to the dentists than seeing those who are homosexual doing in public what they routinely see heterosexuals do. Almost four-fifths of the sample (78.8%) said that they are disturbed to see two men holding hands while walking in public in their hometowns. Seeing women do the same thing was considerably less bothersome, yet more than half of the sample, 55.5%, said they are disturbed to see two women holding hands in public.

Although only one dentist of the 34 in the sample who saw the actor as homosexual would not accept him as a patient in his own practice, approximately 25% of the 90 who responded to that question said that they would not refer patients to a colleague whom they know to be homosexual (Table 5). There was little difference in the percentage of dentists who said they would not refer a patient to a colleague who is homosexual if that dentist were an oral and maxillofacial surgeon or a pediatric dentist. The two

Table 6 No. of dentists responding to questions about homophobic attitudes.*

Attitudes and behaviors Strongly	disagree			St	rongly agree
	1	2	3	4	5
You would feel comfortable working closely with a male who is homosexual	25	8	20	14	23
You would feel uncomfortable if the next door neighbor is homosexual	40	10	19	7	14
If a member of your gender made a sexual advance you would feel angry	14	6	5	13	52
You would feel nervous in a group of people who are homosexual	12	9	11	22	36
You would feel comfortable knowing your clergyman is homosexual	40	18	16	3	13
You would deny that you have friends who are homosexual	60	10	13	1	6
You would feel comfortable if you learned your daughter's teacher was lesbian	34	21	16	8	11
You would like your parents to know that you have friends who are homosexual	31	15	29	5	10
fou would feel comfortable if you learned that your best friend is homosexual	40	18	18	3	11

Based on Hudson and Ricketts.⁴⁰

Table 7 Homophobic attitudes of dentists.

Attitudes toward persons who are homosexual*	No. of dentists
High-grade	2
nonhomophobic (0-12)	
Low-grade nonhomophobic (13-22)	20
Low-grade	33
homophobic (23-33) High-grade	
homophobic (35 and above)	35

separate questions were asked to learn if a homosexual dentist's specialty made a difference in how their colleagues reacted to them. The oral surgeon has greater contact with blood and might have increased potential to transmit the HIV; the pediatric dentist has more contact with children, which worries people who believe the myth that the incidence of people who are homosexual who have molested children is higher than that of people who are heterosexual who have molested children. More than 15% of the dentist-subjects would solve that "problem" by not admitting people who are homosexual into dental school, thus them from becoming preventing colleagues.

Questions taken from Hudson and Ricketts' ⁴⁰ Index of Homophobia provided more specific information about dentists' attitudes toward people who are homosexual and toward homosexuality. That index was derived by applying a weight to the response dentists made to each question

along a five-point scale and totaling the weighted scores. The questions for this survey were included as part of the larger face-to-face survey conducted during dentists' office hours. Therefore, only nine of Hudson and Ricketts'⁴⁰ 25 questions were used; some were positive and some negative. "Some (of Hudson and Ricketts') questions represent positive statements about gays and their social interactions; the remainder are negative. Positive and negative statements were used to control for any biases."

Table 6 shows the total number of dentists who responded to each of the questions taken from Hudson and Ricketts⁴⁰ and used in the survey.

Responses to negatively worded items were reversed before scoring. With only nine questions used, their scoring index was adjusted for this survey. Dentists who scored from 0 to 12 are regarded as high-grade nonhomophobics and those who scored from 13 to 22, as low-grade nonhomophobics. Those who scored between

23 and 33 are regarded as low-grade homophobics and those who scored above 33 are regarded as high-grade homophobics. The lowest score possible is 9 and the highest, 45. Table 7 shows the number of dentists described as high and low nonhomophobic and high and low homophobic, according to Hudson and Ricketts. 40

Conclusions

All the colleagues, dentists, and nondentists in practice, in academia or in public health, with whom this study was discussed, presumed that because so much discrimination exists in the country, dentists as a group also discriminate against persons who are homosexual. Many suggested that some dentists would examine the patient at a first visit but would then seek some seemingly logical excuse to preclude the need to make additional appointments. Many suggested that persons who are homosexual are not rejected because of AIDS, but that AIDS exacerbates a rejection.

So much has been written in the past few years about the epidemiological factors and the legal and ethical ramifications of AIDS that some behavior today may be different from what it was in the past few years. However, because there were no empirical studies of that behavior, the information obtained in this study cannot be compared with previous data, but records only how dentists act and think today.

Although some discrimination was anticipated, this research empirically demonstrated mostly the opposite. Only one dentist refused to examine the actor when he played the part of an intravenous drug user. One dentist examined the actor at the first appointment although he perceived him to be homosexual, but he refused to make additional appointments for him. A total of 68 of 69 dentists who saw the actor when he played the part of a person who is homosexual or an intravenous drug user (the 33 dentists who saw him as heterosexual were all willing to accept him as a patient) examined him at the first appointment. A total of 67 were willing to make additional appointments for him whether they perceived him to be homosexual or as using intravenous drugs.

The data collected during the postexamination interviews showed that the expectation of discrimination against persons who are homosexual is based on a solid foundation. Most of the dentists questioned for this study had negative attitudes toward persons who are homosexual and homosexuality. Using their index as a guide, 68 of the 90 who responded to the questionnaire, are what Hudson and Ricketts⁴⁰ classify as having either low-grade or high-grade homophobia. However, despite that homophobia, they did accept the actor playing a person who is homosexual as a patient.

The dentist-subjects were not asked about their own sexual preferences during the postexamination interviews because it was believed that the responses would be suspect. As the data show, considerable homophobia does exist among the dentists. It might be assumed that dentists who are homosexual who have remained "in the closet" have learned to shield themselves from discrimination and may not answer the question honestly. Because there are many persons who are homosexual in society, some dentists randomly selected for this study could very well have been homosexual. If, in fact, some dentists were homosexual, they did not mention it. There is no way to know at this time if, or how, the subject-dentists' sexual orientation would have affected the sample

Clearly, the "cards were stacked" when the study was set up as many dentists still feel a "lack of busyness." This particular actor was hired to portray a patient who obviously needed a great deal of treatment so that most dentists would want him as a patient. If, however, a man who needed little treatment had been selected, a very different cost-benefit situation could have been set up. But, a dentist rejecting that actor as a patient would have been able to claim that it was not because of the patient's homosexuality, but because "he didn't need much treatment and I didn't want another patient at this time."

Other than the economic factor, some dentists might have accepted this stigmatized man because they actually did fear a lawsuit would be brought against them if they refused to treat him. However, it is also possible that dentists believe that they have a professional and ethical obligation to care for all persons who come to them for treatment.

Summary

The purpose of this study was to determine whether dentists discriminate against members of groups who are at great risk of AIDS. A prospective experiment with dentists as subjects and an actor who posed as a patient who is either homosexual, heterosexual, or an intravenous drug user

was performed. Overwhelmingly, the data demonstrated that dentists will accept persons who are homosexual and persons who are drug users even though their responses on a survey questionnaire indicated that dentists are decidedly homophobic.

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Dr. Hazelkorn is director, Program in Dental Public Health, Health Resources Management (M/C 923), School of Public Health East, the University of Illinois at Chicago, Box 6998, Chicago, 60680. Address requests for reprints to the author.

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