Physicians' Attitudes Toward Homosexuality—Survey of a California County Medical Society

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ATTITUDES OF PHYSICIANS toward homosexuality have been infrequently assessed. In most such studies attitudes toward etiology, morality, legality and attempts to reverse the condition have been emphasized. A landmark event in the evolution of professional attitudes toward homosexuality in the United States was the deletion of homosexuality per se from the third edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM III) of the American Psychiatric Association in 1973. Yet, controversy continues in both professional and lay circles about how homosexual persons should be considered in society.

Physicians' attitudes are important because of their normative role in society[1] and because of the possible impact of such attitudes on the structure and quality of patient care.[2]

This study was conducted to ascertain physician attitudes toward homosexuality in general and toward homosexual colleagues and patients in particular. It is significant and fortuitous that the study was undertaken just before widespread publicity linking the acquired immunodeficiency syndrome with male homosexual behavior. Preliminary results have been published previously.[3]

Methods

In February 1982, questionnaires were mailed from the University of California at San Diego to all 2,364 members of California's San Diego County Medical Society. A cover letter requested participation in a study designed to assess physicians' attitudes toward homosexuality and toward homosexual patients and colleagues. The survey instrument included a limited number of demographic questions (year of graduation from medical school, sex, medical specialty and practice setting). This was followed by four major attitudinal questions:

1. Should a highly qualified homosexual applicant be admitted to medical school? (Yes;no)
2. Should homosexual physicians be discouraged from seeking residency training in any of the following specialties: pathology, pediatrics, general surgery, psychiatry, radiation therapy? (Yes, should be discouraged; no, should not be discouraged)
3. Suppose you learned that a physician-colleague is homosexual. Would you continue to refer your patients to this physician if he or she worked in any of the following specialties: pediatrics, general surgery, psychiatry, radiation therapy? (Yes, would continue to refer; no, would discontinue referral)
4. How do you feel about treating homosexual patients? (No negative feelings; sometimes uncomfortable; often uncomfortable)

On the reverse side of the survey instrument, a validated 20-item, 5-value Likert-type attitudinal scale (Heterosexual Attitudes Toward Homosexuality [HATH] Scale)[4,5] was included to assess attitudes toward homosexuality.

Raw data for demographic variables were recoded for the purpose of statistical analysis. The year of graduation from medical school was grouped into four categories: (1) before 1950, (2) 1950 through 1959, (3) 1960 through 1969 and (4) 1970 through 1981. Practice setting was coded to reflect the predominant form of practice: private practice, academic medicine or other. Because the responses reflected as many as 45 areas of specialization, it was necessary to edit and combine specialties as follows: general and family practice, internal medicine and subspecialties, obstetrics and gynecology, pediatrics, psychiatry, pathology and radiology, surgical specialties (excluding orthopedic surgery), orthopedic surgery and other.

Responses on the HATH scale (Table 1) yielded an overall score for each respondent. The data were analyzed by computer using the Statistical Package for the Social Sciences[6] at San Diego State University. Significance was tested using the χ^2.

Results

Demographics

Of the physicians surveyed, 42.7% (a total of 1,009) responded. The respondents were, in the main, male (93.0%) and in private practice (86.4%) or academic medicine (10.8%). Most (81.3%) graduated from medical school after 1949 and the majority (57.2%) between 1950 and 1969. About 43% practiced in primary care specialties (general or family practice, internal medicine or pediatrics), 23.3% were in surgical specialties and 6.9% practiced psychiatry. Medical specialty responses varied from a low of 26.6% for obstetricians and gynecologists to a high of 47.1% for internal medicine physicians. Although female physicians comprise less than 5% of the membership of the San Diego County

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Medical Society, their response rate far exceeded that of male physicians (60% versus 39.6%). When stratified by year of graduation from medical school, response rates varied inversely with recency of graduation, from a low of 29.2% for graduates between 1970 and 1981 to a high of 58.9% for those before 1950. Although the highest response rate occurred among those graduating before 1950, these physicians represented only 12.5% of the total population.

HATH Data

HATH scores were computed for 930 respondents. Overall, 37.0% of respondents scored between 20 and 49 (homophilic, those with favorable attitudes toward homosexuals); 40.1% between 50 and 69 (neutral), and 22.9% between 70 and 100 (homophobic, those with unfavorable attitudes toward homosexuals). Significant differences among respondents emerged when stratified by sex, practice setting (Table 2) and year of graduation from medical school (Figure 1). Women tended to give more homophilic responses than men, and men tended to give more "undecided" responses about homosexuality. Physicians who identified their principal practice setting as either academic medicine or other, such as public health or occupational medicine, were more positive in their attitudes toward homosexuality than were physicians in private practice. When stratified by year of graduation from medical school, a significant and consistent pattern emerged. Roughly by decade, the more recent the graduate, the more homophilic the HATH score. Conversely, the earlier the year of graduation, the more homophobic the score.

When the responses on the HATH scale were analyzed by physician specialty, pronounced differences were observed (Table 3). Homophilic responses ranged from a low of 20.4% for surgeons (excluding orthopedic surgeons) to a high of

TABLE 1.—*The Heterosexual Attitudes Towards Homosexuality (HATH) Scale*

*Items**
1. I enjoy the company of homosexuals.
2. It would be beneficial to society to recognize homosexuality as normal.
3. Homosexuals should not be allowed to work with children.
4. Homosexuality is immoral.
5. Homosexuality is a mental disorder.
6. All homosexual bars should be closed down.
7. Homosexuals are mistreated in our society.
8. Homosexuals should be given social equality.
9. Homosexuals are a viable part of our society.
10. Homosexuals should have equal opportunity employment.
11. There is no reason to restrict the places where homosexuals work.
12. Homosexuals should be free to date whomever they want.
13. Homosexuality is a sin.
14. Homosexuals do need psychological treatment.
15. Homosexuality endangers the institution of the family.
16. Homosexuals should be accepted completely into our society.
17. Homosexuals should be barred from the teaching profession.
18. Those in favor of homosexuality tend to be homosexuals themselves.
19. There should be no restrictions on homosexuality.
20. I avoid homosexuals whenever possible.

*The items that should be reversed in scoring are: 3, 4, 5, 6, 13, 14, 15, 17, 18 and 20.

TABLE 2.—*HATH Scale Results, Stratified by Respondents' Sex and Practice Setting*

Physician Variables	*HATH Scale Categories (%)*			
	Homophilic	*Neutral*	*Homophobic*	*N*
Sex*				
Male	35.7	40.8	23.5	(890)
Female	50.7	23.2	26.1	(69)
N	(353)	(379)	(227)	(959)
Practice Setting†				
Private	33.1	41.4	25.5	(836)
Academic	58.9	28.0	13.1	(107)
Other	58.0	32.3	9.7	(31)
N	(358)	(386)	(230)	(974)

HATH = Heterosexual Attitudes Towards Homosexuality

*$\chi^2 = 9.11$, not significant.
†$\chi^2 = 34.56$, $P < .001$.

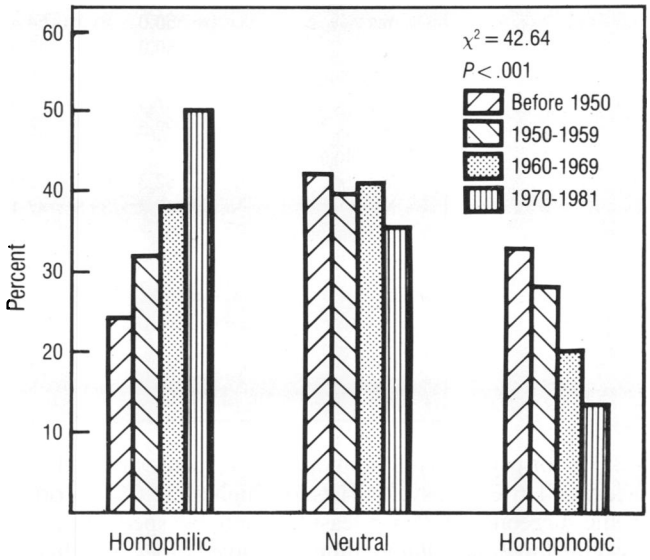

Figure 1.—Heterosexual Attitudes Towards Homosexuality (HATH) scale results, stratified by year of graduation from medical school.

TABLE 3.—*HATH Scale Results, Stratified by Respondents' Specialty*

*Respondents' Specialty**	*HATH Scale Categories (%)*			
	Homophilic	*Neutral*	*Homophobic*	*N*
General and family practice (GP/FP)†	33.5	35.5	31.0	(155)
Internal medicine (IM)	47.6	39.3	13.1	(206)
Obstetrics/gynecology (Ob/Gyn)	35.7	32.9	31.4	(70)
Pediatrics (Peds)	56.4	33.3	10.3	(39)
Psychiatry (Psych)	62.3	36.1	1.6	(61)
Pathology and Radiology (Path/Rad)	28.3	45.6	26.1	(46)
Surgery (excluding orthopedics) (Surg xOrt)	20.4	49.1	30.5	(167)
Orthopedic surgery (Ortho)	22.0	46.0	32.0	(50)
Other	37.5	39.0	23.5	(136)
Totals	37.0	40.1	22.9	100.0
N	(344)	(373)	(213)	(930)

HATH = Heterosexual Attitudes Towards Homosexuality

*$\chi^2 = 94.65$, $P < .001$.
†The codes given in parentheses are those used in Table 4.

TABLE 4.—*Question: "Should a highly qualified homosexual applicant be admitted to medical school?"*

	Respondent Specialty*† (%)										
	GP/FP	IM	Ob/Gyn	Peds	Psych	Path/Rad	Surg xOrt	Ortho	Other	Total	N
Yes	63.7	79.4	68.6	81.6	90.8	65.2	66.1	51.0	65.7	70.3	(652)
No	36.3	20.6	31.4	18.4	9.2	34.8	33.9	49.0	34.3	29.7	(275)
N	(157)	(204)	(70)	(38)	(65)	(46)	(164)	(49)	(134)	...	(927)

*$\chi^2 = 55.75$, $P < .001$.
†See Table 3 for an explanation of column headings.

TABLE 5.—*Question: "Suppose you learned that a physician-colleague is a homosexual. Would you continue to refer your patients to this physician if he or she worked in any of the following specialties?"*

	Respondent Specialty* (%)									
Would continue to refer	GP/FP	IM	Ob/Gyn	Peds	Psych	Path/Rad	Surg xOrt	Ortho	Other	Total
Pediatrics†										
Yes	50.0	61.3	54.4	64.1	70.3	42.2	45.6	44.0	52.6	53.7
No	50.0	38.7	45.6	35.9	29.7	57.8	54.4	56.0	47.4	46.3
General surgery‡										
Yes	67.5	83.6	73.5	77.1	92.2	64.4	71.2	57.1	74.0	74.6
No	32.5	16.4	26.5	22.9	7.8	35.6	28.8	42.9	26.0	25.4
Psychiatry§										
Yes	52.3	64.5	52.9	72.2	71.9	46.7	52.1	52.0	53.8	57.1
No	47.7	35.5	47.1	27.8	28.1	53.3	47.9	48.0	46.2	42.9
Radiation therapy‖										
Yes	70.9	89.6	77.6	80.0	95.3	68.9	82.6	70.2	83.2	81.4
No	29.1	10.4	22.4	20.0	4.7	31.1	17.4	29.8	16.8	18.6

*See Table 3 for an explanation of column headings.
†$\chi^2 = 25.49$, $P < .005$.
‡$\chi^2 = 31.94$, $P < .001$.
§$\chi^2 = 20.96$, $P < .01$.
‖$\chi^2 = 58.29$, $P < .001$.

62.3% for psychiatrists; homophobic responses ranged from a low of 1.6% for psychiatrists to a high of 32.0% for orthopedic surgeons. The three least homophobic specialties were also the three most homophilic, in ranked order: psychiatry, pediatrics and internal medicine. Two specialty groups, general and family practice and obstetrics/gynecology, reported responses that were almost equally distributed among homophilic, undecided and homophobic categories.

Attitudinal Questions

When asked if a highly qualified homosexual applicant should be admitted to medical school, 29.7% of all respondents were opposed (Table 4). Differences among specialties on this item were significant. The most opposed to entry were orthopedic surgeons (49.0%); the least opposed to entry were psychiatrists (9.2%).

When those surveyed were asked whether homosexual physicians should be discouraged from seeking residency training in various specialties, responses varied significantly by respondent specialty. Overall, homosexual physicians would find least opposition if they sought residency training in pathology (11.0%) or radiation therapy (13.4%); they would find most opposition to seeking training in pediatrics (45.0%) or psychiatry (39.0%). More than half of respondents in orthopedic surgery, pathology and radiology, and general and family practice were opposed to homosexuals training in pediatrics. Least opposed were psychiatrists, internists and pediatricians themselves. Similarly, for psychiatric residency, orthopedic surgeons, pathologists and radiologists, and general and family physicians were most opposed. Psychiatrists themselves were least opposed to homosexuals training in their own field (22.2%). Regarding homosexuals seeking residency training in pathology, pathologists and radiologists combined (24.4%) were the most discouraging; psychiatrists were the least discouraging (1.6%).

The third attitudinal question concerned whether or not the respondents would alter their referral pattern if they learned that a colleague to whom they previously referred patients was homosexual. Referrals to known homosexual physicians would be discontinued by substantial numbers of responding physicians (Table 5). More than 40% would discontinue referrals to homosexual pediatricians and psychiatrists, a quarter to homosexual general surgeons and nearly a fifth to homosexual radiation therapists. When analyzed by respondent specialty, significant differences emerged. For homosexual pediatricians, the greatest loss of continued referrals would occur among half or more of pathologists and radiologists, orthopedic surgeons, other surgeons and general and family physicians. The smallest loss of referrals would be from psychiatrists, pediatricians themselves and internists. For homosexual psychiatrists, the smallest loss of referrals would come from pediatricians and fellow psychiatrists. To homosexual radiation therapists (overall losing fewer referrals), about 30% of pathologists and radiologists, orthopedic surgeons and general and family physicians would discontinue referrals. With regard to homosexual general surgeons,

the greatest range by respondent specialty was noted. About 43% of orthopedic surgeons would discontinue referrals, whereas only 8% of psychiatrists would do so.

To the final attitudinal question—How do you feel about treating homosexual patients?—the majority (60.6%) of respondents reported "no negative feelings," whereas 39.4% acknowledged being "sometimes" or "often" uncomfortable. Differences among specialties on this item, in general, were not pronounced and did not achieve statistical significance. However, among those who reported being "often uncomfortable," fewer pediatricians and internists were represented; no psychiatrists reported feeling "often uncomfortable."

Comment

In all, 43% of the members of the San Diego County Medical Society replied to a one-time mailed questionnaire on homosexuality. This is an acceptable response rate methodologically.[8-11] We did not include disclosure of sexual orientation, an obviously relevant variable, as a background question; it was deemed that this question would have adversely affected the overall response rate. Regarding analysis of the data, caution is warranted in interpreting the statistically significant differences reported in the tables. The physicians who responded to this survey did not precisely parallel the characteristics of the population as stratified by medical specialty, sex and year of graduation from medical school. The correspondence between actual respondent behavior and expressed attitudes toward homosexual physician colleagues and patients cannot be stated with certainty. This difficulty is a more general shortcoming of attitude surveys.[12] Despite these limitations, the findings of this study are important and relevant to homosexual physicians and patients, to medical educators and to medical ethicists and policy-makers.

The major findings of the survey include the following:

- The prevalence of homophobic attitudes among physician members of the San Diego County Medical Society responding to the survey was 22.9% as measured by the HATH scale; 40% were neutral or ambivalent in their attitudes toward homosexuality; somewhat more than a third manifested homophilic attitudes.
- Of responding physicians, 30% would not admit a highly qualified homosexual applicant to medical school.
- Dramatic and consistent differences in attitudes toward homosexuality were noted when results were stratified by year of graduation from medical school. More contemporary graduates were clearly more accepting of homosexuality than their predecessors.
- Pediatrics and psychiatry are viewed as especially sensitive specialties for homosexual physicians. Almost 40% of respondents would discourage homosexual physicians from seeking training in pediatrics or psychiatry. Moreover, learning that a colleague to whom they previously referred patients was homosexual, more than 40% of respondents would cease referrals to physicians in these specialties.
- Three fifths of the respondents stated that they had no negative feelings in treating homosexual patients.

Analysis of the HATH data by respondent specialty suggests the following conclusions: the least homophobic specialties were, in ranked order: psychiatry, pediatrics and internal medicine; the most homophobic specialties, with 30% or more expressing negative attitudes, were, in ranked order, orthopedic surgeons, gynecologists, general and family physicians and surgeons (excluding orthopedists).

Regarding attitudes toward entry to medical school, residency training and consultant referral, similar attitudinal patterns were found. Psychiatrists across the board were most positive in their attitudes; after psychiatrists, pediatricians and internists were more accepting than those in other specialties. Negative attitudes toward homosexuals in the medical profession were most prominent among surgeons (especially orthopedic surgeons), pathologists and radiologists, and general and family physicians.

The inclusion of a question regarding physician comfort in treating homosexual patients was to test the hypothesis that prejudice toward homosexuals is underestimated when physicians are asked to make judgments about patients who are homosexual. We postulated this tendency because of an ethic prevalent in society and inculcated in medical training that physicians provide unbiased care for all patients—setting aside personal prejudice. We reasoned that attitudes toward entry of homosexuals into the medical profession and its various specialties would correlate better with more general measures of prejudice, such as the HATH scale. Indeed, in a previous study[13] it was suggested that physicians are reluctant to acknowledge *personal* prejudice in patient care, while being aware of the prevalence of such prejudice in other physicians.

We believe there to be a substantial discrepancy between the number of physicians in our study reporting "no negative feelings" in treating homosexual patients (60%) and the number scoring in the homophilic range on the HATH scale (37%). Whereas more than 60% of the respondents scored in the intermediate or homophobic range on the HATH scale, only about 40% acknowleged being "sometimes" or "often" uncomfortable in treating homosexual patients. This interpretation, that respondents had difficulty recognizing prejudicial feelings in the domain of patient care, is consistent with Allport's general theory of prejudice (that most people are unaware of their own bias).[14] The hidden nature of prejudice in patient care is an example of the concept of *nonconscious ideology* developed by Bem and Bem.[15,16]

This study was done before the widespread publicity identifying male homosexual behavior as the major risk factor for acquired immunodeficiency syndrome in the United States. We believe the study shows a substantial antecedent stigma associated with homosexuality among physicians in the San Diego County Medical Society. Various studies have suggested that negatively stereotyped patients receive less adequate health care.[2] Studies should be done to assess further the impact of such stigmatization on quality of care delivered to homosexual patients. With regard to the status of homosexual physicians and medical students, our study shows that sexual orientation is a barrier to professional entry and the pursuit of specialty practice, no matter how highly qualified a person.

Summary

All 2,364 members of the San Diego County (California) Medical Society were surveyed regarding their attitudes toward homosexuality, homosexual colleagues and patients. The response rate was 43%. Strongly negative attitudes to-

ward homosexuality were expressed by nearly a quarter of respondents, and 30% would not admit a homosexual applicant to medical school. Almost 40% would discourage homosexual physicians from training in pediatrics or psychiatry. More contemporary graduates were more accepting of homosexuality than their predecessors. Significant differences were evident when results were stratified by respondents' specialty. Done before widespread publicity linking acquired immunodeficiency syndrome with male homosexual behavior, this study shows a substantial antecedent stigma associated with homosexuality among physicians in a county medical society.

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Nonsurgical Management of Necrotizing External Otitis

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NECROTIZING EXTERNAL OTITIS was first characterized by Chandler[1] who reported on 13 patients in 1968 and coined the term "malignant external otitis." The disease was described by Meltzer and Keleman[2] in 1959 as pyocyaneous osteomyelitis of the temporal bone, mandible and zygoma. Chandler's initial paper was followed by other reports[3,4] indicating that the patients who survived were those who received surgical debridement as the main part of their therapy. As the disease became better understood and recognized earlier, patients began to be identified before extensive osteomyelitis of the base of the skull had developed. This, along with improved antimicrobial therapy for *Pseudomonas aeruginosa,* allowed for some modification of the initial principles of treatment.

The first mention of successful medical management was also reported by Chandler in 1972.[5] In 1981 Doroghazi and co-workers[6] reported 21 cases and did an up-to-date review of the literature. In this series nine patients were treated medically. Six of these were cured, therapy was not successful in two and one improved. The remaining 12 patients required surgical procedures and, of these, 10 were eventually cured after debridement and long courses of antibiotic therapy.

We have recently successfully treated five consecutive cases of necrotizing external otitis without surgical intervention (Table 1). While treating these patients, it became apparent to us that the role of surgical procedures is currently misunderstood by many medical and surgical consultants, and it was felt timely to present our guidelines for therapy.

Management hinges on the realization that the disease is an osteomyelitis of the base of the skull that progresses either through Santorini's fissures or along the tip of the mastoid to involve the stylomastoid and jugular foramina. Reports describing temporal bone specimens[7,8] clearly show that the disease spares the pneumatic spaces of the mastoid and middle ear. Therefore, principles applicable to suppurative otomastoiditis are inappropriate and should not form a basis for therapy in this process.

The disease initially should be managed medically as a multispecialty problem following these principles: First, the ear should be carefully cleaned and inspected under an operating microscope on a daily or twice-a-day basis. Topical antibiotics in the form of gentamicin sulfate ophthalmic drops are applied to the cleaned canal three times a day. Second, the clinician should obtain adequate specimens for culture and adequate antibiotic coverage is essential. Tube dilution sensitivity tests or other equally sensitive techniques should be used to identify the best antibiotic or combination of antibiotics. Because an aminoglycoside will almost always be chosen, results of audiograms and serum creatinine levels must be evaluated to warn of impending aminoglycoside toxicity. Third, diabetic management needs to be carefully monitored to prevent the possibility that the infection causes the diabetes to go out of control. Fourth, surgical treatment is indicated only when the disease progresses despite adequate medical management. At operation, attempts to evacuate pus in a closed space or to "decompress" the facial nerve should not be made. Rather, the surgeon should remove necrotic bone and debris, thereby reducing the bulk of infected tissue. The presence of facial nerve paralysis is not an indication for an operation unless it occurs while the patient is on antibiotic therapy (see patients 2 and 5, Table 1). In this situation physicians may need to reassess the general condition of the patient, the degree of diabetic control and appearance of the ear before deciding on the therapeutic approach.

The role of diagnostic imaging in necrotizing external otitis is far from clear. We usually obtain a computed tomographic (CT) scan of the temporal bone and base of the skull at

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