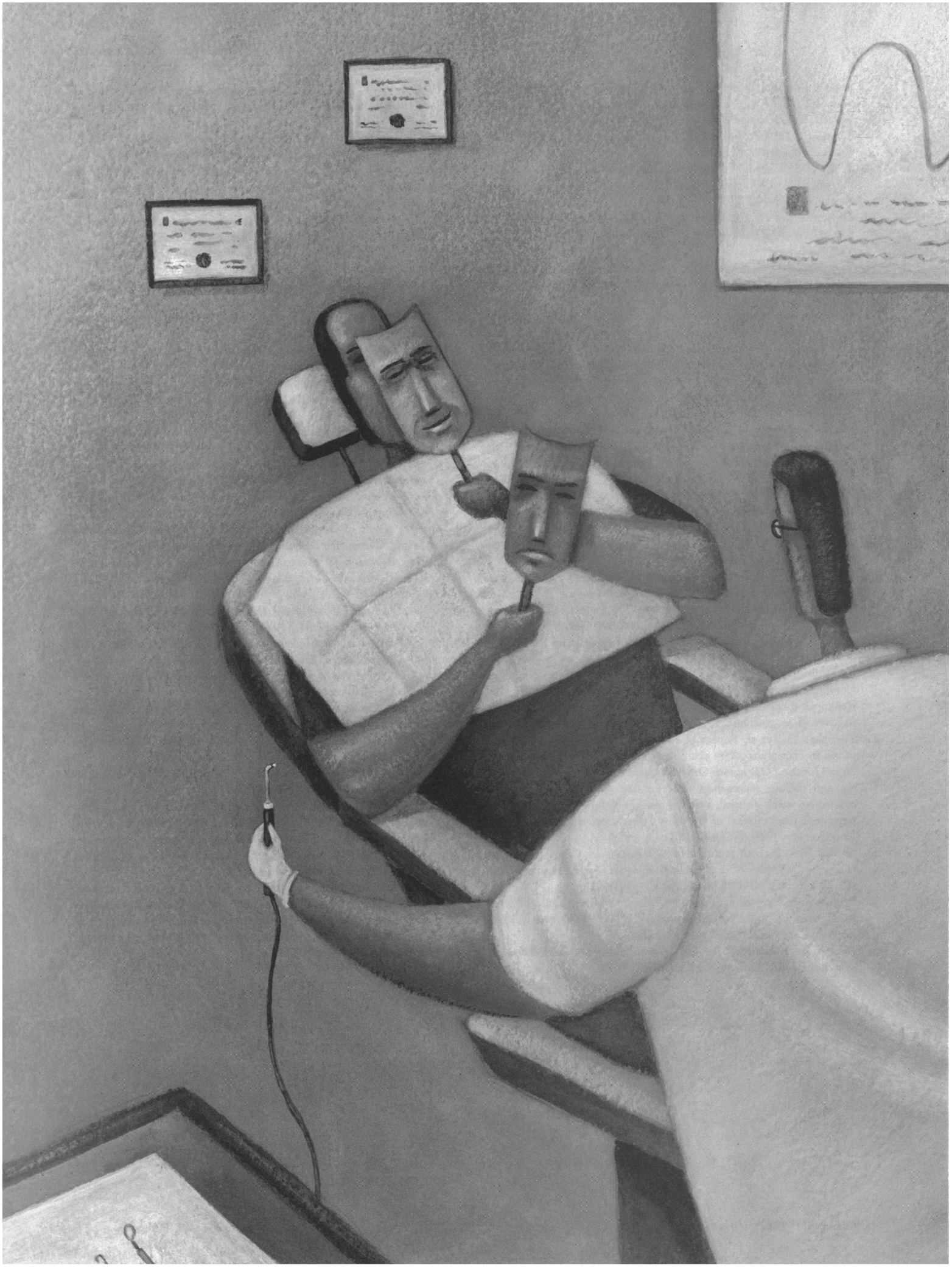

ACTORS PLAY PATIENTS

Using Surrogate Patients to Look into Private Practice

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SYNOPSIS

THE AUTHORS DESCRIBE a prospective research design in which actors serve as surrogate patients; this approach can be used to study health care delivery in providers' private offices. A previously published study—in which an actor with actual dental pathology played the roles of a heterosexual, a homosexual, and an intravenous drug user to learn how dentists would respond to a new patient who appeared to belong to a group at high risk for AIDS—offers an example of the design methodology.

The authors discuss the benefits and limitations of the design and note that the behavior of other health care practitioners can be examined using simulated patients. Using carefully selected and trained professional actors rather than untrained patients or students can increase the reliability of findings and protect the rigor of the research.

As consumers, we seek assurance that the products and services we use are safe and reasonably priced. We ask for information about the businesses and people who sell us our homes and automobiles, do our plumbing, or prepare and sell the food we eat. But when we go to a dentist or other health care provider, the possibility of severe illness or death for either ourselves or a family member is in the forefront of our thinking, and we tend not to do comparative shopping.

Today's patients may seek more information from a health care provider than patients did in the past, but most lack basic understanding of the many issues involved in developing a differential diagnosis or treatment plan or are too emotionally involved to evaluate what is said to them. Additionally, most health care services are delivered in an environment that is wisely concealed from view or review; the assurance of confidentiality between doctor and patient essentially guarantees that little will ever be divulged about that relationship.

In this paper we report on a research design that we have used to obtain information about dentists' office procedures. This approach allowed us to directly observe the behavior, attitudes, and treatment decisions of practicing dentists while maintaining the anonymity of the doctor/patient relationship. We will describe how the proposed methodology can overcome some of the problems associated with the study of health care professions and professionals. Finally, we present the benefits and limitations of the technique described in this paper and include a discussion of the ethical issues involved.

Illustration by John Berry

The patient is really an actor. In randomly selected dentists' offices he played one of the following roles—heterosexual, homosexual, IV drug-user—to find out if dentists avoided treating patients perceived to be at risk for HIV infection.

Traditional Research Approaches

Though other research techniques used to study the behavior of health care professionals have helped collect a great deal of useful data, all are limited in the amount and type of information they can obtain about private office practices. Collecting data retrospectively, a commonly used research approach, is best done where there are great numbers of records—such as in hospitals and insurance companies, which employ large staffs solely to maintain patient and treatment data for various review committees and to report costs to third-party payers and patients. Private offices rarely have large data information systems. Additionally, because both patients and doctors want to maintain confidentiality about patients' histories, health, and treatment, private offices' records are less accessible to researchers than institutional records.

The survey questionnaire, another commonly used data-collection technique, has several limitations. By asking practitioners to provide information about their own activities, behavior, and attitudes with reconstructed self-reports, researchers may obtain data that are not completely reliable. For instance, practitioners may (*a*) respond as they believe the interviewer desires, (*b*) answer in a way that makes them appear more competent and more successful, (*c*) deliberately provide inaccurate data to hide improper care, (*d*) have incomplete or inaccurate memories of events, or (*e*) respond to a hypothetical question in a way that is unlikely to accurately predict real behavior. In his classic 1934 study of the relationship between how people respond to surveys and their actual behavior, LaPiere asked restaurateurs and hotel managers in California if they would serve Asians in their establishments. The respondents said that they would not. At a later date, however, LaPiere observed that Asians were served at the same hotels and restaurants.[1] Though Epstein and his colleagues used the survey technique, they stated that it was not always appropriate in studying health professionals' behavior because it is difficult "to select comparable samples of patients in different types of practices or to control for patient differences."[2]

A third technique, direct observation, does provide researchers with great control over accuracy but is only occasionally used because of the intrinsic difficulties involved. Becker et al.[3] and Freidson[4] studied doctors' behaviors, spending months in close concentrated contact with very small samples of subjects. In general, despite assurances of confidentiality, few patients or practitioners would permit an outsider to observe them or record the procedures in an office, even with an unattended camera. Furthermore, Miller and his colleagues have shown that adding a third party to the environment affects the behavior of both the doctor and the patient.[5]

Proposed Research Design

We have used a prospective research design to directly observe the treatment and decision-making practices of dentists.[6–8] In one study, we tested the hypothesis that dentists would reject as a patient someone who was a member of a group known to be at high risk for AIDS.[6] In the late 1980s, both the scientific and lay literature reported that it was common for physicians and dentists to refuse to treat homosexuals or men who merely looked gay to them because they feared contracting or transmitting the AIDS virus.[9–12] A professional actor was selected to play the part of a patient newly arrived in the area. From approximately 50 actors who responded to a series of advertisements, we chose a male actor with dental disease that would not be

expected to cause pain or become more severe within the foreseeable future. Clinical and radiographic examinations were performed on the surrogate patient. The investigator explained the three roles he was to play (as a stereotypical homosexual, an IV drug user, and a heterosexual), coached him on how to act, and stressed the importance of professionalism and anonymity. Suggestions on his mode of dress and actions had been solicited from people who were members of, or involved with, the drug and gay communities.
To pretest the planned responses, the actor/patient visited five dentists and changes were made as necessary.

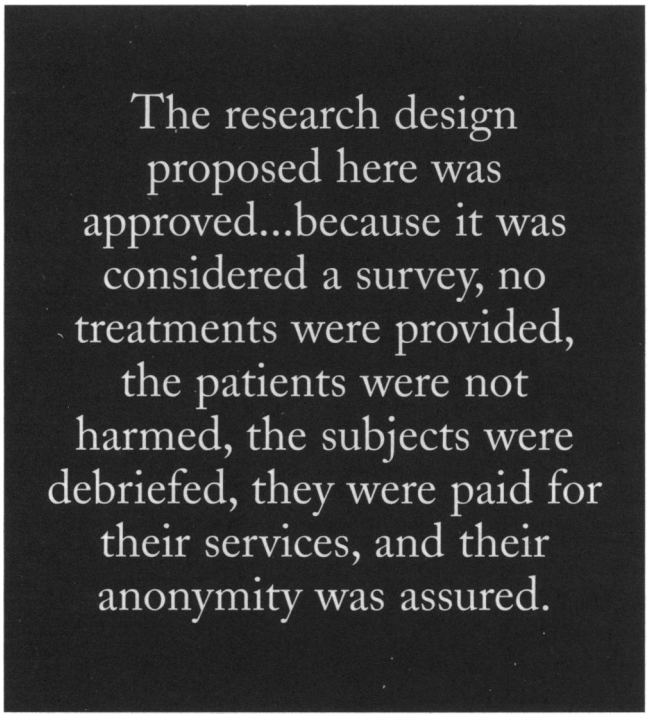
We made appointments for an examination for the "patient" with 102 practitioners randomly selected from a list of general practice dentists licensed by the Illinois Department of Professional Regulation. The dentists were then randomly assigned to one of three different groups. In this experimental design, the randomly selected dentists were the subjects and the one patient playing three parts was the treatment factor. He had the same dental pathology yet he portrayed a different role in each visit.

The actor/patient brought his newly taken radiographs with him to the office visit and asked for an examination; this was done to prevent treatment being given at the first appointment and to avoid unnecessarily wasting the dentist's time. The patient saw 34 dentists when he took the part of a homosexual, 35 when he acted as an IV drug user, and 33 as a heterosexual. At the end of each examination the patient paid for the visit in cash and attempted to make a second appointment to determine whether dentists would refuse to make a follow-up appointment with a person he/she perceived to be gay or an IV drug user.

One dentist of the 35 who saw him when he played the part of an IV drug user refused to examine him during the initial visit, and one of the 34 who saw him when he acted as a homosexual refused to make a second appointment.[6] Thus, despite our hypothesis which anticipated discrimination and a rejection of the patient when he played the part of the homosexual, our study demonstrated that just the opposite happened. And the data was of the type that could not have reliably been gathered using traditional research methods.

After each visit, the actor left and immediately completed a questionnaire about his experience in the dentist's office.

The investigator then entered the office and asked permission to conduct a face-to-face 20 minute interview (using a questionnaire) with the dentist about their payment systems, responses to OSHA regulations, their attitudes toward homosexuality and intravenous drug use, and their knowledge and attitudes about AIDS and behavior toward AIDS patients. The investigator then debriefed the dentists, informed them of their participation as uninformed subjects in the research, and asked how they perceived the patient when he was in their offices. Only one dentist who saw the actor when he played the part of a homosexual said he did not believe him to be gay, and only four of those who saw him when he played the part of an IV drug user said they did not believe he was one.[6]



At the end of the interview, the investigator canceled the second appointments made by the patient and paid the two dentists who asked for payment for the time spent with the investigator. In all, slightly over 400 dentists were part of this and the other research projects[7,8] in which actor/patients were used. Many of the dentists attempted to return the fee paid to them by the actor/patient, but the investigator refused. Of the approximately 400, only six became upset when they learned that they were uninformed subjects. The records of the simulated patients' visits to these six dentists were destroyed without being used.

Limitations and Ethical Considerations

Though the research design described above has been used successfully in several types of studies (a single condition with multiple samples of subjects, multiple conditions with multiple samples of subjects, and multiple conditions with a single sample), certain careful conditions and restrictions should always apply.

Acute pathological conditions that could place the patient at risk of becoming more seriously ill and damage the rigor of the research, such as bronchial infections or abscessed teeth, are not appropriately studied with this design. The patient's condition should be regularly monitored during data collection. Patients with acute disease could place the unsuspecting subject/practitioner in an uncomfortable position of seeing a potentially serious condition without being allowed to treat it immediately. In

addition, the patient should be trained to refuse any treatment or any additional tests that might have a negative effect on his or her condition.

Pathological conditions that are not easily visible or require numerous, expensive, or invasive testing, such as colitis, should not be used with this design. Conditions presented by ambulatory patients and easily examined, such as dermatological lesions, visible hemorrhoids, certain optometric problems, and many dental diseases are most appropriate for the design proposed here.

In this type of study, data collection is very time consuming. Only three appointments could be made each day to accomodate the time required for travel, appointment, and follow-up questionnaire. However, since the selection of dentists and the assignment of the subject's role are random, a large sample size is not required.

The debriefing process must be carefully done at the end of the interview after the investigator has clearly demonstrated to the subject with a well-prepared questionnaire that the objective of the research was to obtain significant data.

Rubin differentiates between research projects that temporarily withhold information and those that involve "deliberate misrepresentation [which] usually constitutes a breach of trust."[13] The research design proposed here was approved by the Institutional Review Board of the University (the ethical review board) and also by the Director of the Office for Protection from Research Risks of the U.S. Department of Health and Human Services because it was considered a survey, no treatments were provided, the patients were not harmed, the subjects were debriefed, they were paid for their services, and their anonymity was assured.[14]

Only carefully trained professional actors, tested under actual conditions in controlled pretests, should be used since they are less likely than nonactors to vary their presentation to the subjects.

Conclusion

The simulated patient technique is not new. Medical and dental schools use simulated patients to teach students history-taking techniques in lifelike situations and, in some cases, to examine the students' knowledge.[15,16] A similar technique has been used to test for housing or job discrimination. Investigative reporters commonly pose as consumers; recently an investigator examined long-term care facilities under the guise of looking for a nursing home for her mother.[17]

Using patients with actual pathology and presenting the same patient with the same condition to all subjects avoids one of the inherent problems of retrospective research studies, in which researchers view many conditions presented to many different practitioners. This surrogate-patient-based study can generate accurate data on health care providers' behavior in the environment in which they actually practice. This is an important tool to improve our understanding of private office practice behavior. And with adjustments to accommodate the specific structures and ethics of different situations, it is a technique that can be generalized to many settings.

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References

1. LaPiere RT. Attitudes versus actions. Social Forces 1934;13:230–237.
2. Epstein AM, Begg CB, and McNeil BJ. The use of ambulatory testing in prepaid and fee-for-service group practices. N Engl J Med 1986;314:1089–1094.
3. Becker HS, Geer B, Hughes EC, and Strauss AL. Boys in white. Chicago: University of Chicago Press, 1961.
4. Freidson E. Doctoring together. New York: Elsevier Books, 1975.
5. Miller RA, Ndhlovu L, Gachara MM, Fisher AA. The situation analysis study of the family planning program in Kenya. Stud Fam Plann 1991;22:131–143.
6. Hazelkorn HM. The reaction of dentists to members of groups at risk of AIDS. J Am Dent Assoc 1989;119:611–619.
7. Hazelkorn HM. A comparison of dental treatment plans under different reimbursement systems. J Pub Health Pol 1985;6:223–235.
8. Hazelkorn HM, Macek MD. Perception of the need for removal of impacted third molars by general dentists and oral and maxillofacial surgeons. J Oral Maxillofac Surg 1994;52:681–687.
9. Wolinsky H, Brune T. Dentists shun AIDS patients. Chicago Sun-Times 1987 July 19; p.5.
10. Boffey PM. Doctors who shun AIDS patients are assailed by Surgeon General. New York Times 1987 Sept. 10; p.1.
11. Searle ES. Knowledge, attitudes and behavior of health professionals in relation to AIDS. Lancet 1987;1(8523):26–28.
12. Anti Discrimination Unit of the New York City Commission on Human Rights. Report on discrimination against people with AIDS and people perceived to have AIDS. New York: City of New York Commission on Human Rights, Updated Aug 1987.
13. Rubin Z. Designing honest experiments. Am Psychol 1973;28: 445–448.
14. McCarthy CR. Director, Office for Protection from Research Risks, USDHHS, Notice of Compliance, Mar 11, 1982.
15. Barrows, HS. An overview of the uses of standardized patients for teaching and evaluating clinical skills. Acad Med 1993;68:443–453.
16. Johnson JA, Kopp KC, and Williams RG. Standardized patients for the assessment of dental students' clinical skills. J Dent Educ 1990;54:331–333.
17. Lieberman T. Nursing homes: when a loved one needs care. Consumer Reports 1995 Aug:518–527.