THE INFLUENCE OF SOCIAL STRUCTURE ON BEHAVIOR:

A STUDY OF THE DENTAL STUDENT-PATIENT RELATIONSHIP

by

JUDITH L. SHUB

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William Kornhauser
Chairman of Examining Committee

Nov 30 1977
date

Bogdan Denitch
Executive Officer

Bob Lauer

Patricia Kendall

Arnold Simmel
Supervisory Committee

The City University of New York

ABSTRACT

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JUDITH L. SHUB

Advisor: Professor William Kornblum

The topic of this dissertation is the influence of the social context on professional-client relationships. Specifically, it explores characteristics of relationships between dental students and patients receiving treatment in the dental school clinic. It has been assumed in many investigations of the patient-practitioner relationship that the behavior of the doctor is controlled by a uniform set of professional norms which govern all patient-practitioner interaction. Empirical findings suggest that it is the structure of the organization of medical care which exerts the primary influence on the physician's behavior with patients. This dissertation demonstrates the influence of the structure of the organization of dental care on students' behavior with patients. It is based on data from survey and participant observation research conducted at a private dental school in the northeastern United States.

Previous studies of student and faculty conceptions of the dentist's role have failed to relate measured attitudes to actual student performance with patients. It has been assumed that the dental school functions as the socialization agent for the profession of dentistry, imparting to students the scientific knowledge, technical skills, values and norms of the dental profession. Such studies have concluded that, by and large, the schools have been unsuccessful in transmitting professional norms to their students. Therefore, it is predicted that student behavior will violate these norms.

In the present investigation, it was hypothesized that support for norms for the interpersonal aspects of dental treatment in each clinical specialty would be inversely related to the amount of emphasis placed on the mechanical aspects of dental treatment in the teaching of that specialty. Thus, student conformity with norms for interpersonal relations with clinic patients was expected to vary in different specialty clinics.

To identify norms for the student-dentist's role with patients, a survey of faculty members was conducted. While there was strong consensus among members of the faculty about how students are expected to behave, differences in support, consistent with the initial hypotheses, were noted between instructors from different clinical teaching departments. Similar surveys of two consecutive junior and senior classes demonstrated that, while students agreed less strongly than their instructors with the set of norms presented, they believed faculty support to be even weaker than their own.

When junior and senior students were observed treating patients in three specialty clinics, differences were noted in the characteristic behavior in each specialty. This suggests that the social structure of each clinic has an important influence on student behavior with patients.

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I dedicate this dissertation to Jerry Shub.

CHAPTER I

INTRODUCTION

The Problem

The topic of this dissertation is the effect of the social context on professional-client relationships. Specifically, it focuses on the characteristics of relationships between the dental student and the patient receiving treatment in the dental school clinic.

With the increased capacity of medicine and dentistry to prevent and treat disease, the influence of the relationship between the patient and practitioner on health has become a topic of concern.[1] This relationship is an important variable influencing the success of treatment and preventive measures. In dentistry, the relationship between the patient and practitioner has a direct effect on the efficacy of patient care.[2] Routine visits to a dentist, for example, are an essential aspect of prevention. Whether a patient will visit a dentist routinely is influenced by the patient's experiences with dentists.[3] Indeed, two of the prevailing hypotheses about factors which predispose people to avoid preventive care involve the patient's perception of the dentist and the patient's fear of pain and anxiety associated with treatment.[4] Both of these obstacles

are affected by the dentist's perception of his role as reflected by his behavior in his relationships with patients.

The problem of this study is to determine what factors influence the behavior of dental students in the doctor-patient relationship. This question is part of a more general sociological concern with the determinants of individual behavior in social roles. The research focuses on the variables in the social structure of the school clinic which influence the behavior of dental students with their patients.

One assumption of many investigations of the patient-practitioner relationship in sociology has been that the behavior of the doctor is controlled by a uniform set of professional norms which govern all patient-practitioner interaction. It is presumed that these norms are supported by a set of values universally held by members of the medical professions. If this assumption were valid, research would reveal that powerful mechanisms for social control exist (sanctions, socialization, etc.) and severely limit deviations from normative behavior. However, empirical findings indicate that different norms about patient care prevail in different treatment settings.[5] For example, Mumford has observed the effect on norms of variations in the hospital environments in which interns are trained.[6] In another study, Sudnow has demonstrated how the attitudes and behavior of those handling newly deceased patients vary widely in different hospital settings.[7] Such studies have

underscored the influence of the immediate social setting on the creation of norms for professional behavior. Both Freidson and Mechanic conclude that it is the structure of the organization of medical care which exerts the primary influence on the physician's behavior toward patients.[8]

The behavior of the dental student with a patient is a direct concern of the dental educator. This is demonstrated by the increasing number of departments of behavioral science, community and preventive dentistry in American dental schools. Behavioral sciences were included as topic areas in the National Board Examinations in dentistry during the last decade. In 1974, the first steps were taken to establish a behavioral science section at the national meetings of the American Association of Dental Schools. This increasing concern with the social aspects of dental practice came in response to the critical statements of the dental director of the Kellogg Foundation, Dr. Blackerby, in 1960.[9] Blackerby stated:

> I am motivated by a strong conviction that the social aspects of dentistry are now seriously neglected in the typical dental student's education, and by a sincere desire to find ways of correcting this basic deficiency in the methods of preparing dentists for their role in society.[10]

Young and Smith, in their review of the characteristics of the dental profession, emphasize this concern. They state, "it has been felt that the technical excellence achieved by dentists in America and their grounding in the biological sciences have not been accompanied by the development of socially aware individuals who function at optimum

levels, either in relation to the patients they treat or the community in which they practice."[11] The findings of this study suggest that this technical excellence is acquired through an emphasis on the technical aspects of treatment in dental education.

Great emphasis in dental education on the mechanical and technical aspects of treatment influences the attention given the interpersonal or social aspects of the professional role. This same issue appears in the literature on medical education.[12] Mumford addresses the problems of balancing an emphasis on the interpersonal aspects of care and technical treatment skills in the training of interns. She cites an illustrative story told about Robert Loeb's housestaff rounds at Bellevue.

> A resident asked whether it was to determine the temperature, moisture, or strength of the arm that Dr. Loeb shook hands with a patient on rounds. The physician's response was, "Gentlemen, the thing that I am doing is greeting another human being."[13]

Since the dental student must acquire an even greater number of mechanical and technical skills than the medical student, the problems of balancing an emphasis on these two crucial aspects of care are all the more critical. The effect on norms of the "conflict" between these two aspects of patient care in the training environment is examined in this analysis.

Most studies of professional-client relationships have examined the relationship between the physician and his patient. Recently, some attention has been given to the relationship between the dental patient and the dentist and

its influence on the quality of patient care. The characteristics of this relationship reflect the character of the profession as it has developed over the past century.

The Dentist-Patient Relationship

Historical Context

The dentist-patient relationship assumes greater importance as the desirability of regular dental treatment for effectively maintaining oral health emerges. Early in its history, dental care involved mainly the extraction of painfully diseased or broken teeth. This service, as were other surgical procedures, was performed by community barbers. Dentures were prepared by local silversmiths or craftsmen and were ill-fitting. These early dentures functioned only in maintaining the shape of the face and did not aid in mastication. Patients went to the dentist in extreme discomfort and were grateful for any relief.

Through the eighteenth and nineteenth centuries, two distinct branches of medical care developed, as represented by the physician and the "barber-surgeon." This latter branch of the health care professions, forming the foundation of the modern fields of dentistry and surgery, had a parallel but separate development from the mainstream of the medical profession.[14]

Medicine and dentistry have common characteristics as a result of a shared concern for the total health of the individual. Both manifest the characteristics of helping

professions which have experienced rapid change. These characteristics include the rapid growth and adoption of new technologies and a subsequent depersonalization of patient care.[15] The steady increase in the number of people served by each dentist since 1930 is one factor contributing to the depersonalization of care. It is believed that the character of dental practice has been significantly affected by the shortages of dentists and the increased patient load. Patients now find it more difficult to obtain appointments and may be forced to travel greater distances to obtain dental care. This is particularly true in rural areas and in areas of urban poverty. Further, when patients finally do arrive at a dental office, "they are likely to find that they spend less time with their dentist and that there is a small likelihood that a personal relationship can develop.[16]

The shortage of practitioners has been attributed to the reduction in the number of dental schools during the 1920's. This resulted from efforts by the American Dental Association to upgrade the standards of professional education during the 1920's. Prior to 1920, there were approximately one hundred and fifty dental schools in the United States. These had been established by entrepreneurs who viewed such schools as potential sources of profit.[17] Today, there are fifty-nine schools offering undergraduate training leading to the D.D.S. or D.M.D. degree.

Up until the early part of the twentieth century, dentistry was primarily a technical occupation. As surgery

was in its earliest stages, dentistry was oriented toward mechanical procedures alone, lacking any scientific basis. Diseased teeth were either extracted or "reconstructed." Moreover, dental disease was not recognized as a disease process by the early dentists and areas of infection were left untreated. Thus, localized infections were allowed to spread, posing a more serious threat to the health of the patient. In the 1920's, both the sciences and the "medical arts" were fused in dental education. American dentistry had been indicted by the European stomatologists for erecting "masoleums of gold,"[18] elaborate "tombs" over serious infections. Dentistry was held in such low esteem in the medical and scientific communities that it was omitted from those medical school curricula developed early in the century. Columbia University, for example, founded its College of Physicians and Surgeons, incorporating the fields of medicine and surgery in the establishment of its medical school, leaving the training of the dentist-technicians to those proprietary schools in existence in the early part of the century. Later pressures brought the incorporation of a scientific foundation in dental training and practice.

Prior to the First World War, the publication of the Flexner Report helped bring about the restructuring of medical education, transforming the medical school from a preceptor-based trade school to its current status in the university and scientific communities. In 1926, the Geis report on dental education, also sponsored by the Carnegie

Foundation, was published. Its publication brought the closing of many dental schools of doubtful caliber. The number of dental schools dropped drastically as those unable to meet the new standards shut down. The remaining schools became affiliated with universities.[19]

Shortly thereafter, the Depression contributed further to the shortage of dentists by limiting the number of students able to afford to attend professional school.

Dental educators faced several obstacles to their efforts at formalizing the training of dental professionals. "The earliest schools had to struggle against the opposition of dentists who had been trained as preceptors and against a lack of support from physicians, most of whom held dentistry in low esteem."[20] Those dentists, like early physicians, had had a limited amount of scientific knowledge to acquire. As the body of knowledge associated with the profession expanded, dental training became more specialized and complex. Placing greater emphasis on the scientific bases of the technical aspects of dentistry contributed to its advancement as a profession.

Research Trends

Most sociological investigations of patient-practitioner relations have focused on the relationship between patients and physicians, as have studies of professional behavior generally. Examination of the relationship between the dentist and patient is interesting as well and can serve

as a means of expanding knowledge of the characteristics of role relationships. While parallels certainly exist between the roles of dentist and physician, analyses of the similarities and dissimilarities are useful for increasing understanding of the elements of such relationships which are functional and dysfunctional in meeting the treatment objectives of both patients and practitioners.

It has been asserted that "most dentists in practice follow a code of behavior and a set of social and ethical values that conform, on the surface, to the norms demonstrated by the professional schools." However, recently many leaders of the profession have expressed their discontent with the "product of dental education."[21]

The research on the dentist-patient relationship to date has been based on assumptions about professional norms similar to those underlying the functionalist theories used in analyses of the physician-patient system. In addition, as Erwin L. Linn has pointed out,

> research about the dentist-patient relationship has been mainly concerned with variations in the behavior, feelings, and attitudes of patients. The dentist appears only insofar as he may be advised about the management of patients. His personality and social expectancies are not included among the variables of the relationship.[22]

While Linn maintains that the exclusion of the dentist's psychological and social characteristics is appropriate given the realities of that relationship as he has observed it,[23] doing so results in the neglect of two important factors. First, variables in the dentist's behavior

which contribute to the dentist-patient relationship are directly related to the treatment, its effectiveness, and the patient's behavior and comfort. And, second, while Linn describes the dentist's personality as "hidden behind a uniform professional manner," it is likely that variations exist in this "manner." Determination of what the characteristics of the dentist's "professional manner" are is needed.

As part of his doctoral work in sociology at the University of Chicago, Quarantelli conducted interviews with one hundred and sixty dental students selected from a state and a private dental school to determine their image of the dentist-patient relationship.[24] He described his findings about how the students believe the public sees the dentist, how they see their relationship with their patients, and how they view their patients.[25] Quarantelli found that the students believe the public has a negative view of the dentist for three reasons. First, students reported their belief that the public views the dentist as having only mechanical skills. The second reason for the public's unfavorable view of the dentist is its dislike of the pain associated with dental treatment. Students also believe the dentist's fees are seen as too high.[26]

The students were divided on how they viewed their relationships with patients. Some described the relationship with the patient as the primary component of the relationship; others saw the dental work itself as central. Some viewed their career as a "humanitarian calling," while

those with an instrumental view of the patient's role described their career as only a "job."[27] Quarantelli found that the dental students he interviewed described their patients in terms of stereotypes such as the "talkative patient."[28] While Quarantelli did focus on the student's image of the dentist-patient relationship, there is no discussion of the relationship between the students' perceptions and their experiences in their dental training.

In the only major investigation of the dentist-patient relationship, Linn studied the behavior of dentists and patients in two dental clinics to determine what behaviors always must be present in the relationship for it to continue.[29] He identified conformity as the governing attribute for the patient and, for the dentist, the authority to direct. Linn found that patients rarely directed or requested anything from the dentist. Among those attributes described as "optional" in the relationship were, for the dentist: calmness, orderliness and cleanliness, wearing a white smock and being called "doctor," and control of the social relationship beyond that necessary for treatment. "Optional" attributes of the patient were self-control and calmness. In addition, Linn concluded that the patient's age had an effect on the dentist insofar as young children were talked to more than adult patients and were handled more "informally" by the dentist.[30]

In summary, sociological investigations of patient-practitioner relations in dentistry, like those in medicine,

have focused primarily on the role of the patient, as conceptualized by Parsons. In such research, the behavior of the dentist has been regarded as the product of what Merton and Barber call the "dominant attributes"[31] of the professional role. As it is assumed that the dentist will exhibit "professionalism,"[32] conforming with role expectations most of the time, more emphasis has been placed on the importance of analyzing the patient's role.

Alternative perspectives, such as those coming from conflict theory and symbolic interactionism, are available for analyzing the practitioner's role. In contrast to those defining the professional role as an externally fixed set of norms, Merton and Barber describe a social role as "a dynamic organization of norms and counternorms, not as a combination of dominant attributes. . ." Their approach, in which Merton departs from his earlier commitment to the functionalist perspective of Parsons, maintains that "social relations cannot be exhaustively analyzed in terms of their dominant attributes."[33]

The present investigation views the role of the dentist from this more dynamic perspective. The actual behavior of the dental student will be focused on in the context of the dentist-patient relationship. It is not assumed that pervasive "dominant attributes" determine student behavior to the extent that situational variables do. The findings illustrate the influence of situational variables on student behavior and support challenges, such as those raised by Becker and Mumford,

to early theories of socialization for professional roles.

Research has raised questions about whether certain behavior can be associated with professional status and whether the concepts of professional culture or ethics can be considered the primary determinants of practitioner behavior in a treatment setting. Notions about what professional norms are or should be are linked to conceptualizations of what characteristics define a profession. Investigations of professional norms reflect societal expectations for professional behavior based on common definitions and prevalent sociological theories of behavior.

The Major Health Professions: Medicine and Dentistry

A Comparison of the Medical and Dental Professions

A comparison of medicine and dentistry can help highlight variables affecting professional relationships with clients. They have characteristics in common as health professions. Both, like the legal profession, are representatives of what can be called the "consulting professions." Members of these professions interact primarily with lay-clients, not only with members of the profession. Their clients expect help in dealing with problems which they themselves, as Hughes suggests, cannot handle.[34] Not only do clients seek the special expertise of the professional, they expect help with problems in a very special area of their lives--their health.

In its historical development as a profession, dentistry parallels the course of surgery.[35] The practice of dentistry resembles the practice of medicine in that both routinely involve the "laying-on of hands" in the course of rendering service. Both dentists and physicians are permitted access to intimate areas of their clients' bodies, as well as their private thoughts. For both, any pain inflicted is interpreted as a legitimate part of the treatment process rather than as a physical assault. Both are allowed to perform their services on an unconscious patient and to render a patient unconscious if, in the practitioner's opinion, it is necessary to do so.

Dentistry also resembles medicine in the model of professional training of its neophytes. This training routinely includes instruction in the scientific knowledge and technical skills of the profession as well as supervised experience in clinical practice. In this latter part of their professional training, medical and dental students participate directly in providing patient care. Although permitted to participate in treating patients, the student is not given full responsibility for the treatment and retains the status of "student" rather than "practitioner" while doing so. The way the role of the student is defined affects the student's self-image in his relationships with patients, faculty members, and auxiliary personnel.[36] This inevitably has consequences for how the treatment situation is defined by students, their patients, and their instructors.

The Situational Norms of Professional Practice

As medicine and dentistry share many characteristics as professions, it is likely that they share aspects of professional culture, such as norms, as well. One norm associated with medical practice is the expectation that the practitioner "act." Freidson depicts the professional as primarily oriented toward "doing." This orientation, recognized by Parsons as well, has consequences for professional behavior, influencing the characteristic ways practitioners interact with their patients.[37] Thus, sociological investigations of professional behavior may be more useful than investigations of practitioner attitudes and values to identify actual professional norms. Freidson has observed:

> Insofar as the practice of medicine at all uses science, then, it is characteristically oriented to applying rather than creating or contributing to it. Indeed, since its focus is on the practical solution of concrete problems, it is obliged to carry on even when it lacks a scientific foundation for its activities: it is oriented toward intervention irrespective of the existence of reliable knowledge.[38]

Freidson concludes that the characteristics of everyday medical work "encourage in the practitioner an emphasis on personal rather than general or communal responsibility, which in turn leads to only limited attempts to assure adequate performance." In addition, Freidson continues, "they encourage emphasis on the primacy of firsthand clinical experience rather than scientific laws or general rules, which has the consequence of exaggerating the acceptibility of varying opinions and thus sustaining well-intentioned

resistance to forsaking one's own practices in the face of others' disapproval."[39] While Freidson believes that these forces, which serve as the foundation for norms discouraging collegial control, are sustained and reinforced by the experience of medical work in everyday practice, he cites evidence that medical students are brought in contact with these values before they actually enter practice. Similar findings are reported in studies of medical training. Becker and his associates "found that the two norms of responsibility and experience were critical in guiding the way medical students managed the level and direction of their efforts."[40]

Freidson describes two characteristics of "the clinical mind" which distinguish the practitioner from the theoretician or investigator.

> First, the aim of the practitioner is not knowledge but action. Successful action is preferred, but action with very little chance for success is to be preferred over no action at all . . . Second, the practitioner is likely to have to believe in what he is doing in order to practice--to believe that what he does does good rather than harm, and that what he does makes the difference between success and failure rather than no difference at all.[41]

It is likely that the same norms apply to the practice of dentistry perhaps to an even greater extent than they do to medicine as dentistry has an even greater armamentarium of technical and mechanical skills. In their training, dental students are provided with the skills necessary for practice and given an opportunity to practice these skills. As the applications of most dental treatment techniques are less likely to have significant consequences for the patient

than might much of medical technique, the dentist's orientation to "action" can easily be recognized and accepted by both members of the profession and the public.[42] As in Becker's study, experience receives great emphasis in dental training. This study identifies the norms of clinical dentistry observed in a dental school clinic where "action" and the acquisition of technical skills influence the relationships between dental students and their patients.

Summary

Empirical research on the attitudes of the dental student, like that on the attitudes of the dentist and the medical student, has derived from the functionalist perspective.[43] Assuming that the role of the dentist is acquired during professional training, the dental student has been the subject of sociological and psychological inquiries into the socialization process. Findings have been based primarily on longitudinal and cross-sectional surveys of student attitudes aimed at determining the effectiveness of socialization in professional attitudes and norms. Student characteristics and attitudes which differ from those considered by the researchers to be ideal have been interpreted as failings in the socialization process or deficiencies in the profession's ability to recruit suitable students.[44]

A premise of this discussion is that any analysis of professional behavior cannot begin with a fixed set of assumed norms or ethics as expectations for actual student

behavior. Further, departing from the traditional functionalist conception of the role of the professional school as an agent of socialization for the profession, it is not assumed that socialization, in the sense of value change, will in fact occur in the professional school. The behavior manifested in dental school will not necessarily be carried over into practice. Rather, this dissertation will show that, as the work of Freidson and others has indicated, the norms of the situation influence behavior.

NOTES

[1]See, for example, David Mechanic, Medical Sociology (New York: The Free Press, 1968), especially pp. 365-403; and Ivan Illich, Medical Nemesis (New York: Random House, Inc., 1976)

[2]See William Cinotti and Arthur Grieder, Applied Psychology in Dentistry (St. Louis: C.V. Mosby Co., 1964); R.T. Martin, "An Exploratory Investigation of the Dentist-Patient Relationship" (research report prepared for the Dental Health Education and Research Foundation of the University of Sydney, October, 1965) (xeroxed); Stephen K. Firestein, "Patient Anxiety and Dental Practice," Journal of the American Dental Association, 93 (December, 1976), 1180-1187; Norman L. Corah, "The Dental Practitioner and Preventive Health Behavior," in Symposium on Dental Health Behavior, ed. by Norman Corah. Health Education Monographs, 2 (Fall, 1974), 226; S. Stephen Kegeles, "Current Status of Preventive Dental Behavior in the Population," in Symposium on Dental Health Behavior, ed. by Norman Corah. Health Education Monographs, 2 (Fall, 1974), 197; William E. Brown, ed., Oral Health, Dentistry, and the American Public (Oklahoma: University of Oklahoma Press, 1974); Judith T. Shuval, "Social and Psychological Factors in Dental Health in Israel," Toward a Sociology of Dentistry, The Milbank Memorial Fund Quarterly, XLIX, 3, Part 2, (July, 1971), p. 95. Also see, Stanley H. King, "Social-Psychological Factors in Illness," and George Rosen, "The Evolution of Social Medicine," in Handbook of Medical Sociology, ed. by Howard E. Freeman, Sol Levine, and Leo G. Reeder (2nd. ed.; Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1972)

[3]S. Stephen Kegeles, "Current Status of Preventive Dental Behavior in the Population," p. 197.

[4]Ibid., pp. 199-200

[5]Samuel W. Bloom and Robert N. Wilson, "Patient-Practitioner Relationships," in Handbook of Medical Sociology, ed. by Howard E. Freeman, Sol Levine, and Leo G. Reeder (2nd. ed., Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1972), p. 330; Emily Mumford, Interns: From Students to Physicians (Cambridge: Harvard University Press, 1970); David Sudnow, Passing On: The Social Organization of Dying (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967).

[6] Mumford, Interns. [7] Sudnow, Passing On.

[8] Bloom and Wilson, "Patient-Practitioner Relationships," p.331; Eliot Freidson, Profession of Medicine (New York: Dodd, Mead & Company, 1970); Mechanic, Medical Sociology.

[9] Wesley O. Young and Lawrence Smith, Jr., "The Nature and Organization of Dental Practice," in Handbook of Medical Sociology, ed. by Freeman, Levine, and Reeder, p. 239.

[10] P.E. Blackerby, "Why Not a Department of Social Dentistry?" Journal of Dental Education, 24 (September, 1960), 197-200, cited by Young and Smith in "The Nature and Organization of Dental Practice," p. 239.

[11] Young and Smith, "The Nature and Organization of Dental Practice," p. 239.

[12] See Milton S. Davis, "Attitudinal and Behavioral Aspects of the Doctor-Patient Relationship as Expressed and Exhibited by Medical Students and their Mentors," Journal of Medical Education, 43 (1968), 342.

[13] Mumford, Interns, pp. 184-208.

[14] See A.M. Carr-Saunders and P.A. Wilson, The Professions (London: Frank Cass & Co., Ltd., 1964).

[15] Young and Smith, "The Nature and Organization of Dental Practice," pp. 232-234.

[16] Ibid., p. 234. [17] Ibid., p. 233.

[18] Paper presented by William Hunter before the medical faculty of McGill University in 1910; See William Hunter, "The Role of Sepsis and Antisepsis in Medicine," Dental Cosmos, 60 (July, 1918), 585-602.

[19] Young and Smith, "The Nature and Organization of Dental Practice," p. 233.

[20] Ibid. [21] Ibid., p. 239.

[22] Erwin L. Linn, "The Dentist-Patient Relationship," in Social Sciences and Dentistry: A Critical Bibliography, ed. by N.D. Richards and L.K. Cohen (Netherlands: Fédération Dentaire Internationale, 1971), p. 195.

[23] Ibid.; also see E.L. Linn, "Role Behaviors in Two Dental Clinics: A Trial of Nadel's Criteria," Human Organization, 26 (1967), 141-148.

[24] Enrico L. Quarantelli, "The Dental Student Image of the Dentist-Patient Relationship," The American Journal of Public Health, 59 (September, 1969), 1312-1319.

[25]Ibid., pp. 1312-1313. [26]Ibid., pp. 1314-1317.

[27]Ibid., pp. 1317-1318. [28]Ibid., pp. 1318-1319.

[29]Linn, "Role Behaviors in Two Dental Clinics."

[30]Linn, "The Dentist-Patient Relationship," p. 203; also see Linn, "Role Behaviors in Two Dental Clinics."

[31]Robert K. Merton and Elinor Barber, "Sociological Ambivalence," in Sociological Theory, Values, and Sociological Change, ed. by Edward A. Tiryakian (New York: Free Press, 1963), p. 103.

[32]For a discussion of the distinction between "professions" and "professionalism" see Eliot Freidson, Profession of Medicine, p. 186.

[33]Merton and Barber, "Sociological Ambivalence," p. 103.

[34]Everett Cherrington Hughes, Men and Their Work (Glencoe, Illinois: The Free Press, 1958), p. 141.

[35]See Carr-Saunders and Wilson, The Professions.

[36]See Mary Jean Huntington, "The Development of a Professional Self-Image," in The Student-Physician, ed. by Robert K. Merton, George Reader, and Patricia L. Kendall (Cambridge: Harvard University Press, 1957), pp. 179-188.

[37]Freidson, Profession of Medicine, p. 163.

[38]Ibid., p. 164. [39]Ibid.

[40]See Freidson, Profession of Meeicine, pp. 164-165; and Howard S. Becker, et al., Boys in White: Student Culture in Medical School (Chicago: University of Chicago Press, 1961).

[41]Freidson, Profession of Medicine, p. 168.

[42]"Medicine has three major aspects--preventive, curative and restorative. Most individuals tend to focus their attention on the curative aspects. The same holds true for dentistry." From L.W. Gerson, "Expectations of 'Sick Role' Exemptions for Dental Problems," Journal of the Canadian Dental Association, 10 (1972), 58.

[43]See Chapter II, below, especially pp. 34-44.

[44]See Basil J. Sherlock and Richard T. Morris, Becoming a Dentist (Springfield, Illinois: Charles C. Thomas, 1972).

PART I

NORMS FOR PROFESSIONAL BEHAVIOR IN THE PATIENT-PRACTITIONER RELATIONSHIP

CHAPTER II

ACQUIRING THE ROLE OF A PROFESSIONAL

Introduction

The data discussed in this thesis illustrate how the world in which the dental student interacts with his patients is socially produced and how meanings are fabricated through the processes of social interaction in that world.

The prolonged acceptance of the norm-determined nature of the role of the professional has impeded investigations of physician behavior. It has been observed that, while research on the role of the patient is varied and extensive, there are few studies of physician behavior *in situ*. "Arguments about the doctor's role, when supported by any evidence at all, still rely heavily on an abstract level of analysis, with much extrapolation from existing research."[1] This dearth of information has impeded the development of theory fundamental to understanding the nature of the professional-client relationship.

The Effect of Socialization and Social Structure in the Development of Professional Role Identity

In the literature, "socialization" initially referred only to the process of child development. Parsons, in his

discussion of the mechanisms of socialization, uses the term in a broader sense "to designate the learning of any orientations of functional significance to the operation of a system of complementary role-expectations."[2] Parsons' concept of adult socialization for professional roles has been the basis of research into how professional skills and attitudes are acquired in professional training. In such research, it has been assumed that, during their training, professional students could be expected to acquire the norms and values current in the profession, i.e. learn the professional role.

Early investigations of medical socialization were consistent with functionalist theory.[3] In his early work on the socialization of the medical student, Merton defines socialization as

> the process by which people selectively acquire the values and attitudes, the interests, skills and knowledge--in short, the culture--current in the groups of which they are, or seek to become, a member. It refers to the learning of social roles.[4]

In its specific application to the medical student, it represents the process through which the student "develops his professional self, with its characteristic values, attitudes, knowledge, and skills, fusing these into a more or less consistent set of dispositions which govern his behavior in a wide variety of professional (and extraprofessional) situations."[5] However, important questions remain about the validity of the assumptions underlying the concept of "adult socialization."[6]

First, the degree to which attitudes are determined by professional training has not been ascertained.[7] Other questions exist about the very relationship between the culture of the professional school and that of the profession itself.[8] For example, the existence of what has been termed a "student culture" has been identified in the medical school.[9] Becker and Geer suggest that students acquire attitudes and norms appropriate for behavior in the training setting which do not necessarily reflect the culture associated with the medical profession itself.[10]

A major trend in empirical inquiries has been to determine "whether the professional identity of the physician is an individual product arrived at in an orderly process of adult socialization (medical education) or whether the behavior of the physician is primarily dominated by the structural components of his working situations when he is finally practicing medicine."[11] Evidence supports the latter hypothesis. For example, it has been found that the physician's ability to relate to patients is strongly influenced by his personal preferences for different types of patients.[12] "Taken together with descriptive studies of medical education, which show that interpersonal skills are not seriously taught as part of professional training, questions have been raised about universalism and affective neutrality as intrinsic attributes of the doctor's role."[13]

The central question in research on medical student attitudes has been the determination of how students will

behave with patients.[14] Evidence has emerged which clearly challenges the notion that the medical school is the socialization agent of the values of medicine.[15] It is reasonable to assume, then, that in the professional school, as in practice, the structure of the organization of medical care will exert the primary influence on students' behavior with patients.

Influences on Behavior: Attitudes, Norm Conflict, and Ambivalence

Interpretations of Norm Violations

Variations in individual behavior have been accounted for in a variety of ways. Behavior seen to be in violation of societal or group norms has been labelled "deviant." Other sociologists, for example, Merton, have attributed such variations to norm conflict arising from the multiple roles occupied simultaneously by the individual.[16] In addition, Merton describes five possible modes of individual adaptation: conformity, innovation, ritualism, retreatism, and rebellion.[17] Early conceptualizations of professional roles delineated a fixed set of norms governing professional behavior. Empirical investigations of actual physician, medical and dental student behavior show regular violations of what had been described as fixed and even necessary norms for professional behavior.

In one study of dental student attitudes, Sherlock and Morris observe what they term "declining ethics" in dental students during the period of professional training.[18] Differences in the symptoms, mode of treatment, and organization of

the specialty clinics suggest that different norms can be expected to prevail in each of the clinic settings considered in the present research. To the extent that this is so, students should not be expected to conform to one discrete set of norms, one professional role, but can be expected to subscribe to various norms, to varying degrees, in varying settings. As a result, it may be more accurate to interpret those student attitudes observed in prior studies as a product of what Merton and Barber have termed "sociological ambivalence,"[19] rather than what Sherlock and Morris have called "declining ethics."[20]

> In its most extended sense, sociological ambivalence refers to incompatible normative expectations of attitudes, beliefs, and behavior assigned to a status or to a set of statuses in a society. In its most restricted sense, sociological ambivalence refers to incompatible normative expectations incorporated in a single role or a single social status.21

Sources of Sociological Ambivalence

Merton and Barber suggest two sources of sociological ambivalence.

> One source is to be found in the structural context of a particular status. Another source is found in the multiple types of functions assigned to a status--for example, expressive and instrumental functions.

Among the examples they offer is that of the "role of the intellectual expert in a bureaucracy, embracing values derived from the organization."[22] The relationship between the training institution and the profession itself is problematic. While theories of professional socialization assume that the norms and attitudes of the profession are transmitted to stu-

dents during the period of professional training, the norms and attitudes of the professional school are inherently different from those of professional practice. The primary function of the professional school is training, while the primary function of professional practice is providing care. As the student is expected to provide care for patients as a part of professional training, divergent norms are likely to be a source of sociological ambivalence for both students and faculty members. While the student is asked to be both "student" and "'student'-dentist," the faculty members' status incorporates both the roles of "dentist" and "instructor."

A second source of sociological ambivalence can be the contradictory demands of a status.

> The core-case of sociological ambivalence puts contradictory demands upon the occupants of a status in a particular social relation. And since these norms cannot be simultaneously expressed in behavior, they come to be expressed in an oscillation of behaviors: of detachment and compassion, of discipline and permissiveness, of personal and impersonal treatment.23

In any relationship, conflicts arise over which individial's needs or objectives will take precedence. Contrary to Parsons' view, in the relationship between the patient and practitioner, both parties do not enter into a stereotype model relationship in which the rights and obligations or the goals and norms of each actor are rigidly defined. The patient may not accept a responsibility to "get well," or cooperate, or recognize and accept the practitioner's authority. The patient may use the relationship to attain secondary personal gains. For example, he may want the professional

to legitimize his complaints or simply provide personal attention. The practitioner's own needs for respect and appreciation may motivate his behavior with the patient. When the interaction between patient and practitioner occurs in a training setting, the objectives of the practitioner in his role as student are added to the forces motivating behavior. Requirements imposed by instructors further complicate the interactions between student-practitioners and patients. There is evidence that the dental instructors define the situation in the school clinic as a "learning situation" rather than as a "treatment environment." This has clear consequences for the norms for behavior observed in school clinics.

The Functions of Professional Norms

Norms for the dentist's role in the context of the dentist-patient relationship serve important functions in that relationship, as do the technical skills of dental practice. Parsons, in a discussion of the components of the physician's role, points out that, "in a certain portion of cases the doctor has what might be called a perfectly straightforward technological job." However, Parsons recognizes that the physician's knowledge and technical skills are not sufficient in themselves to deal with the range of requirements of the job. "But in common with some and not other technical jobs there is in this case a shading off into cases with respect to which knowledge, skill and resources are not adequate,

with hard, competent work, to solve the problem."[24]

In this regard, dentistry has much in common with medicine. Dentistry also demands extensive technical expertise. The number of technical skills the dentist requires is so extensive that, like the surgeon, the dentist has been portrayed as a "mechanic" or "technician."[25] Dentistry presents many of the same emotional stresses for the practitioner involved in work in an area of the body in which much symbolic and emotional significance are invested. These emotional stresses give added significance to the quality of the affective elements in the patient-practitioner relationship and to the norms for such relationships.

With regard to the role of the physician, Parsons identifies some inherent frustrations which

> acquire special significance because of the magnitude and character of the interests at stake. The patient and his family have the deepest emotional involvements in what the physician can and cannot do, and in the way his diagnosis and prognosis [and manner of treatment] will define the situation for them. He himself, carrying as he does responsibility for the outcome, cannot help but be exposed to important emotional strains by these facts.[26]

Similar frustrations and tension are inherent in the dentist's role as well. Along with the technical component, the role of the interpersonal or affective elements or norms in the patient-practitioner relationship is significant for the performance of the professional role. The perceived importance of these components, considered in the context of the inherent stress and ambivalence of a particular treatment setting, is likely to vary in different situations.

The Role of the Training Setting

Medical educators themselves have expressed fear that, "out of over-concern for the science of medicine, medical education was dehumanizing future physicians."[27] Findings support this concern. In one study, it was found that "the acquisition of technical knowledge and skills is given much more emphasis than the acquisition of medical values at this early stage of the socialization process."[28] Other data suggest that medical and dental training have tended toward training in cynicism.[29]

Whatever the physician's personal attitudes, Bloom and Wilson conclude:

> the constraints upon ongoing behavior are part of the organized setting in which he works. He must abide by these constraints. Opposition involves the threat of sanctions; agreement promises rewards.[30]

This underscores the importance of examing the organization of the medical care setting to predict what attitudes and behavior reflect prevailing norms for the setting, rather than looking to the profession for a set of universal norms.

Indeed, the training setting itself has come to be regarded as an important variable affecting student behavior. Mumford's study of the period during which interns pass from the status of medical student to physician contrasts the effects of two different hospital environments on the norms and attitudes acquired. While the emphasis of her study was not the norms governing physician-patient relations alone, Mumford does cite evidence of variance in these norms in each setting. In particular, she found differences in the willingness

of house-staff to provide patients with explanations of their conditions and treatment.[31] Residents in training at the "Community Hospital" indicated more frequently than those at the "University Hospital" that "they 'would disapprove strongly' if a house-staff member should 'fail to give a patient and explanation of his problems."[32] Mumford concludes:

> In both University Hospital and Community Hospital the environment of work tends to encourage physicians to assign different priorities to certain norms. This is never formally specified; rather, it is the result of the accumulated individual decisions, directions, and reinforcements provided in each hospital. 33

Mumford, as others, identifies what has been termed "increasing cynicism" in the attitudes of medical students.[34] However, she acknowledges the role of the training institution in fostering this cynicism and seeks to specify how different settings emphasize or deemphasize particular aspects of professionalism or idealism.[35]

Recent research on the medical school suggests that the degree of humanitarian motivation or orientation among students should vary depending upon characteristics of the learning environment. As Mumford describes the experience of the intern:

> Practically no one enters this phase of a medical career planning to become careless of scientific standards or of treatment. But each hospital throws the spotlight on certain aspects of the intern's work and leaves some work relatively protected against visibility or supervision and thus potentially subject to neglect. In this process each hospital provides selective reinforcement for some ideals and some of the intern's initial commitments, and each hospital allows some leeway around some other ideals.36

Research on the socialization of the dental student

has focused on the acquisition of attitudes. A similar pattern of increasing cynicism and declining ethics during dental training has been noted.[37] Blumer contends that such studies of attitudes are not as useful or valid as studies of behavior aimed at deciphering the processes through which actors construct social reality.[38] No sociological research has investigated dental student behavior *in situ*, or considered relevant aspects of the social structure likely to influence actual behavior as empirically interesting. None have examined student interactions with patients and instructors. In past research, the attitudes of dental instructors and the effects of the dental school environment itself on student attitudes have been ignored.[39]

NOTES

[1]Samuel W. Bloom and Robert N. Wilson, "Patient-Practitioner Relationships," in Handbook of Medical Sociology, ed. by Howard E. Freeman, Sol Levine, and Leo G. Reeder (2nd. ed., Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1972), p. 332.

[2]Talcott Parsons, The Social System (New York: The Free Press, 1951), pp. 207-208.

[3]See Howard E. Freeman, Sol Levine, and Leo G. Reeder, "Present Status of Medical Sociology," in Handbook of Medical Sociology; and Samuel W. Bloom, "The Sociology of Medical Education: Some Comments on the State of a Field," The Milbank Memorial Fund Quarterly, XLIII (April, 1965).

[4]Robert K. Merton, George G. Reader, and Patricia L. Kendall, eds., The Student-Physician (Cambridge: Harvard University Press, 1957), p. 287.

[5]Ibid.

[6]Bloom, "The Sociology of Medical Education," pp. 164, 169-173, and 152-153.

[7]Ibid., p. 164. [8]Ibid., pp. 169-173, and 152-153.

[9]Howard S. Becker, Everett C. Hughes, and Anselm L. Strauss, Boys in White: Student Culture in Medical School (Chicago: University of Chicago Press, 1961).

[10]Howard S. Becker and Blanche Geer, "The Fate of Idealism in Medical School," in E. Gartly Jaco, ed., Patients, Physicians and Illness (Glencoe, Ill.: The Free Press, 1958), pp. 300-307.

[11]Bloom and Wilson, "Patient-Practitioner Relationships," pp. 330-331.

[12]Ibid. [13]Ibid., p. 330.

[14]Bloom, "The Sociology of Medical Education," p. 165.

[15]Bloom and Wilson, "Patient-Practitioner Relationships," p. 331. See David Caplovitz, "Student-Faculty Relationships in Medical School: A Study of Professional Socialization" (unpublished Ph.D. dissertation, Columbia University, 1961).

[16]Robert K. Merton, "The Role-Set: Problems in Sociological Theory," British Journal of Sociology, 8 (1957), pp. 106-120.

[17]Robert K. Merton, Social Theory and Social Structure (New York: The Free Press, 1968), pp. 193-214.

[18]Basil J. Sherlock and Richard T. Morris, Becoming A Dentist (Springfield, Ill.: Charles C. Thomas, 1972).

[19]Robert K. Merton and Elinor Barber, "Sociological Ambivalence," in Sociological Theory, Values, and Sociological Change, ed. by Edward A. Tiryakian (New York: The Free Press, 1963), p. 103.

[20]See Sherlock and Morris, Becoming A Dentist.

[21]Merton and Barber, "Sociological Ambivalence," pp. 94-95.

[22]Ibid., p. 95. [23]Ibid., p. 96.

[24]Parsons, The Social System, p. 447.

[25]See S.E. Gray, "Iamge of Dentistry, Medicine and Teaching as Seen by High School Students," Journal of Dental Education, 31 (1968), 458-464; Louis Kriesberg and Beatrice R. Treiman, "The Public's Views on Dentistry as a Profession," Journal of Dental Education, 25 (1968), 247-268; and Enrico L. Quarantelli, "The Dental Student Image of the Dentist-Patient Relationship," The American Journal of Public Health, 59 (September, 1961), 1312-1319.

[26]Parsons, The Social System, p. 449.

[27]Bloom, "The Sociology of Medical Education," p. 165.

[28]Caplovitz, "Student-Faculty Relations in Medical School."

[29]See Leonard D. Eron, "The Effect of Medical Education on Attitudes: A Follow-Up Study," Journal of Medical Education, 33, Part 2 (October, 1958), 25-33; Basil J. Sherlock and Richard T. Morris, Becoming a Dentist.

[30]Bloom and Wilson, "Patient-Practitioner Relationships," pp. 331-332.

[31]Mumford, Interns, pp. 175-177.

[32]Ibid., p. 175. [33]Ibid., p. 155.

[34]Ibid., pp. 35-36. Also see Becker and Geer, "The Fate of Idealism;" Eron, "The Effect of Medical Education;" and Milton Davis, "Attitudinal and Behavioral Aspects of the Doctor-Patient Relationship as Expressed and Exhibited by Medical Students and Their Mentors," Journal of Medical Education, 43 (March, 1968), 338.

[35]Mumford, Interns, pp. 243, 199-203.

[36]Ibid., p. 36.

[37]Sherlock and Morris, Becoming A Dentist.

[38]See Herbert Blumer, Symbolic Interaction sm (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1969), pp. 90-100.

[39]For reviews of the recent sociological research on dental education, see Alice Fusillo and A. Stafford Metz, "Social Science Research on the Dental Student," in Social Sciences and Dentistry: A Critical Bibliography, ed. by N. David Richards and Lois K. Cohen (Netherlands: Fédération Dentaire Internationale, 1971), pp. 15-67.

CHAPTER III

CONCEPTUAL BACKGROUND OF THE HIGHBRIDGE STUDY[1]

Conceptual Framework for Analyzing the Behavioral Implications of Organic Symptoms

The Szasz-Hollender Typology

A variety of factors in the social setting influence role behavior. For example, in the relationships between health professionals and their patients, one variable likely to affect the nature of the relationship is the state of the patient's health. It is obvious that the objective state of a patient's health will affect his ability to participate in relationships with medical personnel. It is impossible, for example, for a patient who is unconscious to follow instructions and otherwise participate in his own treatment. The interrelationship between the biological state of the human organism and the social system of medical practice has been noted by Henderson and Parsons. Two physicians, Szasz and Hollender, were concerned with the behavioral implications of organic symptoms for the relations between patients and physicians.[2] They developed a typology of doctor-patient relations based on variations in the organic symptoms of patients. There are three prototype relationships in this typology: "activity-passivity," "guidance-

cooperation," and "mutual participation."

In the "activity-passivity" relationship, the physician assumes an active role in the treatment relationship while the patient remains passive. The relationship between the physician and the patient has been compared to that between a parent and helpless infant. This relationship is considered appropriate in, and was modelled after, emergency situations where a patient is helpless or unconscious.

In the "guidance-cooperation" model, as in the relationship between a parent and child, the patient is aware of what is going on, capable of following directions, and able to exercise judgment. It is applicable to the treatment of acute disorders.

The "mutual participation" relationship is characteristic of the relationship between doctor and patient in a chronic illness where, as in the treatment of diabetes mellitus, the patient is primarily responsible for carrying out his own treatment, with only occasional consultation with the physician. Clearly, different norms govern the doctor-patient relationship in each situation as, in each, the doctor and patient assume very different roles.

This study indicates that the Szasz-Hollender model provides a valuable orientation for predicting different patterns but is inadequate to explain completely the practitioner-patient relationships which arise. Indeed, it appears that the way the medical profession has been organized to manage patient symptoms is the primary determinant of practitioner and patient behavior. Therefore, special

attention was given to the social structure and organization of the clinical departments in the dental school.

Selection of Sites For Study of Student Behavior With Patients

Despite differences in the symptomatology and pattern of treatment in dentistry from those in medicine, there are analogous situations in dental practice to those in medicine. Dentistry primarily treats two diseases, tooth decay and periodontal disease. Less frequently, dentists confront symptoms resulting from congenital defects, trauma, infection, tumors or cysts. Generally, dentists do not provide care to patients in life-threatening situations. Although similarities exist in the procedures utilized in each of the dental specialties, it was anticipated that differences would be evident in the norms for patient care within each specialty.

In the Highbridge School of Dentistry, the site of this investigation, each of the specialty areas of dental treatment is taught by a separate department. While faculty members from any one division within the school may practice general dentistry in their own private practices, in the school, they are responsible for teaching only one specialty area on the clinic floor. While the practice of many of the "specialties" of dentistry, as well as other skills which are departmentalized for teaching purposes (radiography, diagnosis, prevention, etc.), are integrated in the routine practice of general dentistry outside of the school, in the clinic each of these segments of treatment is separated from

the rest.[3]

In the present study, consideration was given to the existence of this separation and the differences in each clinic's organization and function. Concern about how each clinical setting might differ with regard to norms for patterned doctor-patient relationships influenced the selection of clinics in which dental student behavior with patients was observed.

The extent to which the divisions within the school clinic exist because of differences in techniques, patient symptoms, or effective teaching is not known. The interrelationship between the organic symptoms and the social organization of treatment is not immediately obvious. The findings indicate that the social organization of the treatment settings, selected routine procedures, and practitioner behavior do not represent functionally necessary reactions to the organic symptoms encountered.

Three specialty clinics, oral surgery, periodontics, and operative dentistry, were selected as sites for the observation of student behavior with patients. It was hypothesized early in the study, that the instructors from these clinical teaching departments would differentiate themselves from one another in their responses to the faculty survey conducted as part of the present study.[4] This hypothesis, and the decision to focus on these three particular clinical departments at Highbridge, were based on a consideration of the differences in the types of treatment

provided in each clinic and the implications these differences have for requiring different behavior from both dentists and patients. Characteristics of treatment in each of these clinics appear, at first, analogous to those of the medical disorders given as examples of types in the Szasz-Hollender typology. It seems reasonable to assume that, if differences in practitioner behavior exist in different social settings, differences in routine treatment modalities might well be one variable influencing the differences observed.

Characteristics of Selected Clinics

The Oral Surgery Clinic

In the school oral surgery clinic, where students learn to extract teeth, the student-dentist is most likely to see patients who have experienced pain prior to treatment. In the operative dentistry clinic the predominant treatment modality involves the excavation of decayed portions of tooth structure, carious lesions, and the reconstruction of individual teeth with inorganic filling materials. Usually, most patients do not appear in pain or with any prior awareness of their symptoms. It was assumed that this difference would have some effect on the dentist-patient relationship and norms applicable in each of these settings.

Further, it was observed that the treatment plan in the oral surgery clinic is, to a great extent, predetermined. Often there is no consultation with the patient about the treatment plan immediately prior to the procedure by the

student-dentist who will perform it.[5]

The student-dentist sees the oral surgery patient usually only once and, therefore, as is true of many specialists in private practice, does not need to make any effort to encourage the patient to return. In the other clinics, where treatment is protracted due to the student's inexperience and delays involving necessary faculty supervision, students are dependent upon their patients' returning to complete treatment over an extended period of time. In the oral surgery clinic, students do not make appointments with their patients as they do in the other clinics. Thus, the problems encountered in contacting patients and having late or absent patients common in other clinics are nonexistent. Dental assistants present both supervise and intervene in the treatment in the oral surgery clinic. Further, the nature of the treatment itself, which is ordinarily the extraction of one or more teeth, sometimes with the use of general anesthesia, precludes much patient involvement in the delivery of care. In the oral surgery clinic, the dentist assumes the active role in providing treatment for a passive patient as described by Szasz and Hollender in their active-passive model of the patient-practitioner relationship.

The Operative Dentistry Clinic

The organization of the operative dentistry clinic, in contrast with the other clinics in the school, is similar to the "guidance-cooperation" model described by Szasz and

Hollender. The diagnosis of decay in a given tooth is similar to the diagnosis of an acute disease in medicine in its treatment and prognosis. The patient is aware of both his condition and the mechanisms to be employed in treatment--or can be made aware of both by the dentist. There may be opportunities for the patient to participate in some of the decisions to be made about his treatment. Anesthesia may or may not be desired. The type of anesthesia to be administered may be discussed. The type of restoration to be used may also present a choice. The dentist may be more reliant on the patient's cooperation to determine how well a restoration fits, or if it is comfortable, to expectorate, or to rinse.

The Periodontics Clinic

The periodontics clinic appears more similar to the third type of relationship, "mutual participation." Periodontal disease, if untreated or if treatment is not supplemented by the patient's use of recommended home care techniques, is a chronic disease state. The necessity of having the patient maintain a regimen of prescribed home care and professional check-ups is analogous to the treatment of chronic diseases used to characterize the "mutual participation" model.

The periodontic patient usually requires treatment over a protracted period of time. For the treatment to be successful, the patient must continue to come into the clinic. He may also have to cooperate by altering his hygiene regimen

and even, in some cases, his diet. Just as these requirements are unpleasant in their own right, the treatment performed by the dentist itself is often uncomfortable and unpleasant for the patient as well. The patient must be motivated to continue to subject himself to such treatments and to the rigor of establishing new habits and routines. The treatments for symptoms of periodontal disease differ from those observed in the other two clinics described. Thus, it is likely that each would display a different pattern of dentist-patient relationship.

The Study

The amount of emphasis given norms for interpersonal behavior by members of the dental school faculty was assumed to be related to their perception of the importance of one aspect of dental treatment, mechanical technique, as a component of their professional role, and, therefore, in the student's experience in a particular clinic. It was hypothesized that support for norms for humane care would receive greater emphasis from members of the behavioral science, community dentistry, and preventive dentistry divisions than those responsible for teaching clinical technique. It was also hypothesized that support for individual norms would vary based on differences in the dominant treatment modality in the operative dentistry, oral surgery, and periodontics clinics. To test these hypotheses, first, a survey of the members of the faculty of the Highbridge Dental School was conducted. Differences found in the support given norms by

members of the various clinical teaching departments were examined. The social organization of the dental school and its historical background are discussed in Chapter V with reference to these differences. Next, actual student behavior with patients was observed in the operative, oral surgery, and periodontics clinics. Findings illustrate the influence of faculty norms, the organization of treatment, and other aspects of the social structure of each clinic on student behavior.

The findings of the present study indicate an expression of consensus among members of the dental school faculty about their expectations for student behavior with patients in the school clinic. Variations existed in the expectations of teachers representing the different clinical divisions. Student response to the questionnaire survey demonstrates their awareness of expectations and their perception of differences in their own and faculty expectations. Observation of the treatment setting reveals various barriers inhibiting students from meeting expressed expectations. Variations in behavior characteristic of the three settings observed were noted.

Functionalist theory maintains that there is a necessary relationship between the norms of a social situation and the expressed objective, manifest function, of that situation. The findings of the present study suggest that this is not so. Here, the variables within the social structure of each of the three clinics are analyzed in terms of their

latent functions and their effect on student norms in each clinic. The student's primary objective is the satisfactory completion of procedures which he is required to perform as part of his training, rather than the care of the dental patient. When these two objectives appear to conflict, the faculty generally appear to emphasize the former.

The problem of this study is to determine factors which influence the behavior of dental students in the dentist-patient relationship. Functionalist theory, in particular the specific theories of Parsons relative to the relationship between the physician and patient, proposes the existence of patterned roles regulated by a fixed set of norms. Studies of actual physician and patient behavior, on the other hand, suggest these roles may not be patterned and regular but that situational variables play a significant role in determining norms. Research also suggests that individual behavior varies or deviates from prevailing norms not as a manifestation of deviance as much as as a response to the individual's perception of reality. While the results of the questionnaire survey of members of the Highbridge dental school faculty indicate strong support for a set of norms, an examination of actual student behavior shows variations in the actual norms in each of three specialty clinics. The social context of the dental student-patient relationship emerges as an important variable in determining student behavior. How each of the three contexts studied differs and what factors in each environment affect behavior are analyzed and discussed.

In the chapter which follows, a discussion of the study and the methods used to obtain the data analyzed in the dissertation is presented. The fifth chapter contains a description of the research setting which includes the physical characteristics, history, educational format and curriculum of the Highbridge School of Dentistry. The concluding chapters discuss the findings and analyze their implications.

NOTES

[1]The dental school where the research was conducted is referred to as the "Highbridge School of Dentistry" throughout the report. The Highbridge Medical Center, dental and medical schools, and the "Gotham Clinic" are all fictitious names designed to help maintain the anonymity of the actual location. All names of persons used are fictitious as well.

[2]T.S. Szasz and M.H. Hollender, "A Contribution to the Philosophy of Medicine: The Basic Models of the Doctor-Patient Relationship," A.M.A. Archives of Internal Medicine, 97 (May, 1956), 585.

[3]See Appendix I.

[4]See Chapters IV and VI, below.

[5]Alternative treatments to exodontia are available in some cases. On one occasion noted by the investigator, a dentist visiting the oral surgery clinic asked a patient if he had been informed that his tooth did not necessarily need to be extracted. The patient responded that he had not been made aware of the treatment options available to him.

CHAPTER IV

METHODS

Overview

Prior investigations of the norms and attitudes of dental students have analyzed data from either longitudinal or cross-sectional surveys.[1] Evaluations of commitment to norms focus on norms and attitudes derived from ideal formulations of ethical or professional conduct. These studies do not pay much attention to other variables that are important in determining behavior. Actual student behavior during training has not been examined. Further, the relationship between student behavior and attitudes and the situational constraints and social structure--norms, values, sanctions--of the training setting have been ignored. These "salient features" of the social reality, as Freidson termed them,[2] have a significant effect on student behavior. Analyses of the interrelationship between these features and behavior can increase understanding of the dynamics of interpersonal relations in the dental school clinic.

To make up for these deficiencies, data were collected between 1973 and 1975 about the social structure of one dental school, the Highbridge School of Dentistry.[3] Included in this analysis are data from a questionnaire survey conducted of the entire faculty of this dental school, data from two

surveys of third and fourth year dental students enrolled during the 1973-74 and 1974-75 academic years, and data obtained from recorded observations of third and fourth year dental students treating patients in three specialty clinics during the 1973-74 academic year. (Figure 1)

Method	Subjects	Dates
I. Questionnaire Surveys:		
Faculty Survey	Entire Dental Faculty	January, 1974
First Student Survey	Junior & Senior Classes	May-June, 1974
Second Student Survey	Junior & Senior Classes	Nov., 1974-Feb., '75
II. Observations of Students in Operative, Oral Surgery, and Periodontics Clinics	Junior & Senior Classes	January-May, 1974

Fig. 1--Highbridge Study Research Schedule

The analysis will focus on these behavioral data, drawing supplementary information from the surveys as applicable. The objective of the research design was to allow for a holistic approach to the analysis of student conduct in the dentist-patient relationship. It permits an analysis of student attitudes and behavior in the dentist-patient relationship in the context of the social structure in which it

occurs. Although investigations of physician, intern, and medical student behavior in situ have broadened the theoretical base of sociological knowledge of patient-practitioner behavior, no similar studies have investigated the behavior of dental students with their patients. Previously published descriptions of the attitudes of dental students are based primarily on survey and interview data. Interpretations of these data have derived from the functionalist model. The assumptions of socialization theories have been underlying such studies. Attitudes deemed incongruous with professional values, ethics, or humanitarian motivation have been attributed to incomplete socialization. Student attitudes have been viewed as the product of intrapersonal variables. Attempts have been made to correlate student attitudes with variables external to the student's experience in dental training. This approach is consistent with Parsons' reliance on a "concept of the psychological internalization of patterned socialization experience deriving from the normative values of the greater society."[4] In contrast, the present analysis focuses on the context of the student's professional training, the social structure of the dental school.

The Development of the Questionnaire

The first part of the analysis involves the comparison of data collected from surveys of faculty and student expectations for student behavior with patients in the school clinic, the norms for the student's role in interpersonal

relations. A questionnaire was developed and distributed to members of the dental school faculty and administration.[5] Respondents were asked to indicate, on a five-point continuum, whether they agreed or disagreed that each of the twenty-one items represented their expectation for student behavior in the school clinic.

The Identification of Norms

In developing the survey instrument, initially, topics covered in the behavioral science courses at the dental school were reviewed. Through interviews with dental practitioners and educators, concepts central to comprehensive, psychosocially sensitive care[6] were operationalized. From these, a list of topics universally considered relevant was isolated for use as a basis in constructing items for the questionnaire. To facilitate the comparison of actual student behavior with accepted norms, items were designed to represent observable behavior whenever possible. In addition, several items were included which asked for an indication of the respondent's general commitment to values about teaching psychosocial aspects of patient care. The questionnaire developed was pretested using a sample of dental students and faculty from a second dental school in the same metropolitan area during the fall of 1973.

One difficulty in studies of norms in the social sciences has been defining norms.[7] In investigations of professional behavior, norms have been identified in a variety of ways. Professional norms have been derived from the

statements attributed to the founders or other spokesmen representing the profession, such as Hippocrates, as well as from common experience.[8] However, systematic investigation of what practitioners or teachers in the field think is rare. More common are studies of professional socialization which have attempted to gauge student acceptance of professional norms. There are studies of medical and law students in which some of the "elite" norms[9] have been investigated. Merton and others, for example, examined medical students' acquisition of the norm "universalism." [10] Becker has studied the "fate of 'idealism'" in the professional school.[11] In dentistry, Sherlock and Morris recently investigated the socialization of the dental student. The primary focus of their research was the acquisition of professional ethics.[12]

An attempt was made at the outset of the present study to derive professional norms for dentists behavior in the dentist-patient relationship from the code of ethics of the American Dental Association. The only guideline provided by this document, however, is the following: "The Dentist's primary duty of serving the public is discharged by giving the highest type of service of which he is capable and by avoiding any conduct which leads to a lowering of esteem of the profession of which he is a member."[13] As Freidson points out, there is no necessary relationship between the code of ethics of a profession and the behavior of its members.[14] It serves merely as a mechanism to assure the public that the profession claims to be ethical.

The Questionnaire

For the questionnaire, ten aspects of humanely-oriented dental behavior with patients were identified. From each, a pair of opposite items for the questionnaire was constructed.

Instructing patients in oral hygiene and prevention

The first aspect is instructing patients in oral hygiene and preventive techniques. Prevention of disease, which for dentistry includes an emphasis on hygiene, is an integral part of the comprehensive approach to patient care. A department responsible for training students in preventive dentistry has been established in the school. Students are expected to utilize time with their restorative clinic patients for instruction in and reinforcement of preventive care techniques.[15]

Questionnaire items:

#1. It is not efficient for students to discuss oral hygiene and preventive measures with restorative clinic patients.

#15. Students should discuss oral hygiene and preventive measures with restorative clinic patients.

Rapport in the dentist-patient relationship

The second aspect included is rapport with patients. A good relationship, one "marked by harmony, conformity, accord or affinity,"[16] is believed essential to the development of patient trust. Such a relationship facilitates patient cooperation, motivation to follow preventive instruction, and efforts to allay anxieties and diminish discomfort

during dental procedures.

Rapport between the student-dentist and patient is probably the most difficult aspect of the relationship to recognize and document. Factors used as indicators of rapport include conversation between the student and patient not directly related to the immediate dental procedure, the student or patient inquiring about some aspect of the other's life assumed mentioned at a prior visit, and the "atmosphere" surrounding the treatment site. Atmosphere here refers to those situations where students and patients appeared relaxed, smiling, or enjoying humorous situations.

Questionnaire items:

#2. If necessary, students should sacrifice rapport to complete clinical procedures.

#7. Rapport with patients is a necessary ingredient of effective dental treatment.

Providing explanations of procedures involved in treatment to patients

The third aspect considered is providing explanations of procedures involved in treatment to patients. Among the methods proposed for diminishing patient anxiety in treatment is the practice of telling patients what to expect during treatment. The demystification of the procedures and instruments is presumed to reduce patient fear and discomfort. In pedodontics, children's dentistry, the "tell, show, do" technique is employed to lessen patient fear. Studies of clinical pain have found that patients given information about what to expect after surgery require less analgesia postoperatively.[17]

Questionnaire items:

#3. Students should provide patients with a general understanding of the procedures and treatment.

#10. Rather than discuss what he will be doing with the patient, the student should proceed directly with the treatment.

Patient cooperation in treatment

The fourth aspect considered is management of the uncooperative patient. It is interesting to note that faculty responsible for teaching the psychosocial aspects of patient care and interpersonal relations stress the importance of learning to manage problems of patient cooperation. However, when asked about management problems in the clinic, clinical faculty members point out that patients who create problems, or appear as though they might, are dropped from the clinic roster. These faculty members emphasize that the dental school is a training institution first and a health care site second. Students require the maximum amount of time possible to master their clinical skills and therefore cannot afford to diminish this experience by having to attend to an uncooperative patient.

Specifically, it should be noted that both the chairmen of the oral surgery division and the operative dentistry division, who was appointed Associate Dean of the dental school a short time later, commented to the investigator about the appropriateness of including questionnaire items dealing with the management of the uncooperative patient. They pointed out that the questions were not relevant as the

clinic patients are carefully screened.They pointed out that any patient who misses two appointments in the clinic is dropped. Therefore, there are no "difficult patients." This makes it clear that students are not expected to learn to handle patients who miss appointments as part of their clinical training.

Questionnaire items:

#4. It is the student's responsibility to work with even very uncooperative patients in order to develop interpersonal skills.

#14. A student is right to refuse to work with a patient he finds uncooperative.

Objectives of treatment and clinical instruction

The fifth aspect focuses on the perceived emphasis of clinical instruction. The question concerns whether the clinical experience is intended to provide practice in only the mechanical-technical aspects of dental practice, or the interpersonal ones as well. An example of this dimension would be observing students or instructors interrupting patient questions so that the student could "get back to work."

Questionnaire items:

#5. Developing techniques for effective student-patient relationships is as important a part of the student's dental education as the acquisition of clinical skills.

#11. Developing techniques for effective student-patient relationships is not as important in the clinic as is the acquisition of clinical expertise.

Control of patient anxiety

The next aspect addressed is student responsibility for giving attention to patient anxiety and recognizing its indications. Anxiety has been identified as an important cause of patient discomfort in dental treatment. It is accepted that anxiety can be identified and "treated," or alleviated, by the dentist.

Questionnaire items:

#6. It is better for a student to finish his work than spend time attending to indications of patient anxiety.

#12. It is the student's responsibility to recognize and respond to signs of patient anxiety, e.g. body movements, perspiration, sounds, in order to help reduce patient apprehension.

Providing information regarding after-effects and home care

Similar to the third aspect discussed above, students are expected to tell patients what they can expect to experience as an after-effect of treatment. In addition, some treatments require instructions about what to do between appointments. If the patient should rinse, when he can eat, or whether or not to remove dressings or take medication should all be explained to the patient. The oral surgery clinic has prepared a printed instruction sheet for patients which students are expected to distribute to patients after treatment.

Questionnaire items:

#8. It is better for students not to tell patients what they might experience as an after-effect of the treatment.

#16. Students should tell patients what to expect "after the anesthesia wears off," and about any instructions for home care.

Establishment of patient trust

The establishment of patient trust is believed to be fundamental to patient cooperation. There is some debate about whether patient trust in the dentist grows out of rapport between the dentist and patient or comes from the patient's perception of how well the dentist is providing clinical care. It is pointed out that patients have no basis for objectively evaluating the dentist's clinical expertise other than their perception of how concerned the dentist is about their welfare, as evidenced by patients who use objectively less competent or incompetent practitioners while claiming they are the "best in the world," because the patient is comfortable with them.

Questionnaire items:

#9. The dental student should deal with patient feelings at the outset of their relationship by beginning to work promptly and efficiently, thereby establishing patient trust.

#17. The dental student should deal with patient feelings at the outset of their relationship thereby establishing rapport and patient trust, before beginning the planned clinical procedure.

Use of patients' names

The ninth aspect of humanely-oriented patient care is the student's use of the patients' names. It seemed obvious that the dental student should know and use patients' names. This seemed a basic indication of interest, personalization

of treatment, and courtesy. It also serves as one indication of whether the student regards the patient as an example of a dental condition or as a person.

Questionnaire items:

#13. Chairside manner, such as remembering to call the patient by name, is of little importance in the clinic while the student is still learning his technical skills.

#19. Students should address clinic patients by name.

Management of patient pain during treatment

One area of clinical emphasis where interpersonal and behavioral science skills have been shown to play an important role is pain control. The question addressed was whether the faculty emphasize the application of these findings or teach the use of pharmacologic agents alone.

Questionnaire items:

#18. The student should proceed clinically when all objective signs of anesthesia are present, even if the patient professes pain.

#20. The student should make use of his human relations skills in the management of pain.

It should be pointed out with regard to item #18 that the perception of pain is considered to have two dimensions. There is an objective perception--the stimulation of a nerve and the physiological response of the autonomic nervous system--which does not guarantee that the patient perceives a pain stimulus. The recognition of a pain stimulus occurs in the brain and is influenced by additional emotional and psychological factors.[18]

Perceived importance of psychological and social aspects of patient care in clinical teaching

The last item, #21, was included to gauge general commitment to teaching the psychological and social aspects of patient care.

> #21. There is entirely too much emphasis on psychological and social aspects of patient care in dental education.

Once selected, these items were arranged randomly in the questionnaire. Two items were included for each aspect to provide a means of determining respondent consistency.

Norms for Student Behavior: The Survey

Faculty Respondents

The survey of the dental school faculty was conducted during the winter and spring of the 1973-74 academic year using the twenty-one item questionnaire. The purpose of this survey was to determine the amount of faculty consensus and support for norms relating to student conduct with patients in the school clinic.

Questionnaires were sent to all members of the administration and each department, with the exception of Dental Hygiene, Interdisciplinary Correlations,[19] and instructors in extramural hospital affiliated programs. The questionnaires were distributed through the intra-school mail to the two hundred and seventy members of the dental faculty. Their names were obtained from the school catalogue and an official faculty roster compiled by the dean's office of

the dental school.

Each questionnaire included a cover letter signed by the Director of the Office of Education & Behavioral Science (the course director of the Human Behavior Seminar, the behavioral science course) and the investigator.[20] Code numbers were assigned to each to allow the matching of questionnaires to precoded data about respondents obtained from the school catalogue. These data included the individual's sex, department, status as a division director (department chairman), time commitment to teaching, year of dental school graduation, and the dental school attended.

The original mailing in January was followed by a second in March to increase the size of the return. One hundred and seventy-four questionnaires were returned for a 64 percent sample.[21] The responding sample appears to be proportionately representative of the faculty population of the dental school based on a comparison of the variables identified above.

At the time of the survey, the faculty was predominantly male. Only 6 percent of its members were women. Of the respondents, 5. . percent were women.

Twenty-six of those surveyed were, or had been, participants in the Human Behavior course. Of these, seventeen responded (65%), including four of the five social scientists, three of the five psychiatrists, and ten of the sixteen dentists.[22]

Of the twenty-six members of the faculty designated

as "full-time," nineteen responded. Twelve percent of the respondents were clinical or half-time (2 days), and 72 percent were adjunct (1 or 1½ days). (Table 1)

TABLE 1

TEACHING TIME COMMITMENT OF FACULTY POPULATION AND RESPONDENTS

TIME COMMITMENT TO TEACHING	% OF RESPONDENTS (N=174)	% OF FACULTY (N=270)
FULL TIME	11	10
CLINICAL	12	11
ADJUNCT	72	75
UNKNOWN	5	4
TOTAL	100	100

Thirteen percent of the respondents were professors, as compared with 11 percent of the entire faculty. One fourth of the respondents were associate professors, and 41 percent held the rank of assistant professor, proportionate to the faculty population. (Table 2)

Thirty-five percent of the faculty members were graduates of Highbridge Dental School, as were 39% of the respondents. It is estimated that the actual number of Highbridge graduates on the faculty would be higher if the schools of the"unknown" faculty were known. (Table 3)

TABLE 2

ACADEMIC RANK OF FACULTY POPULATION AND RESPONDENTS

ACADEMIC RANK	% OF RESPONDENTS (N=174)	% OF FACULTY (N=270)
PROFESSOR	13	11
ASSOCIATE PROF	25	23
ASSISTANT PROF	41	44
OTHER	16	18
UNKNOWN	4	4
TOTAL	100	100

Table 4 shows the year of graduation from dental school for the faculty sample and respondents. It is interesting that 44 percent of the faculty graduated after 1963, 43% of the respondents, indicating that the faculty contains a large number of relatively young instructors.

The respondents appear representative of the faculty in the proportions of those affiliated with each of the major clinical divisions. (Table 5)

TABLE 3

DENTAL SCHOOL ATTENDED BY FACULTY POPULATION AND RESPONDENTS

DENTAL SCHOOL	% OF RESPONDENTS (N=174)	% OF FACULTY (N=270)
HIGHBRIDGE	39	35
NYU	9	9
PENNSYLVANIA	8	7
OTHER	14	17
UNKNOWN*	30	32
TOTAL	100	100

*"Unknown" category includes those respondents who did not attend dental school, e.g. behavioral scientists

TABLE 4

YEAR OF DENTAL SCHOOL GRADUATION: FACULTY POPULATION AND RESPONDENTS*

YEAR OF GRADUATION	% OF RESPONDENTS (N=174)	% OF FACULTY (N=270)
BEFORE 1933	3	4
1934-1943	14	13
1944-1953	21	23

TABLE 4--Continued

YEAR OF GRADUATION	% OF RESPONDENTS (N=174)	% OF FACULTY (N=270)
1954-1963	18	17
AFTER 1963	43	44
TOTAL	100	100

*Figures include year of graduation from medical or graduate school for non-dentist respondents.

TABLE 5

DEPARTMENT MEMBERSHIP OF FACULTY AND RESPONDENTS

DEPARTMENT	% OF RESPONDENTS (N=174)	% OF FACULTY (N=270)
COMMUNITY DENT.	5	6
ENDODONTICS	6	7
OPERATIVE	9	6
ORAL SURGERY	6	6
ORTHODONTICS	8	10
PEDODONTICS	6	4
PERIODONTICS	14	13

TABLE 5--Continued

DEPARTMENT	% OF RESPONDENTS (N=174)	% OF FACULTY (N=270)
PREVENTIVE	11	8
PROSTHETICS	10	12
OTHER	24	28
TOTAL	100	100

Student Respondents

Following the survey of the faculty, similar questionnaires were distributed to all junior and senior dental students. (N=87) The student questionnaire consisted of two parts. The first was identical to the one given faculty except that the instructions read:

> Usually, students differ with regard to the importance which they attach to various aspects of their interactions with clinic patients. Please indicate how much you agree with each of the following statements by placing a check in the appropriate square in the grid at right.

The second part, which repeated the same items, began with the following instructions:

> Thank you for your responses so far. For the next set of statements please indicate how you believe most of the faculty of this dental school would respond to each of the following statements by putting a check in the appropriate square in the grid at right.

Despite a second mailing of the questionnaire, only thirty-eight (44%) were returned. Of the forty-five juniors,

twenty-seven returned questionnaires, 60% of the class. (Table 6) This represents 71% of the respondents. (Table 7) Only eleven (26%) of the forty-two seniors responded, making up 29% of the respondents. (Tables 6 & 7) Of the six women students in this group, three juniors and three seniors, only one returned a completed questionnaire.

TABLE 6

PERCENT OF JUNIOR AND SENIOR CLASSES RETURNING QUESTIONNAIRES 1973-74 and 1974-75 Surveys*

YEAR OF SURVEY	JUNIORS	SENIORS
1973-1974	60% (N=45)	26% (N=42)
1974-1975	43% (N=49)	86% (N=44)

*The number of students in the 1973-74 junior class is 45 while the number of senior students the following year is 44. This is because two members of the 1973-74 junior class were failed academically for the year. One dropped out of the Highbridge School of Dentistry to attend a different school. The other, while officially a member of the junior class again in the 1974-75 school year, was considered to be a senior respondent in the survey.

The student survey was repeated during the 1974-75 academic year. Fifty-nine of the 93 (63%) students responded. Twenty-one of the forty-nine juniors (43%) returned questionnaires, as did 38 of the 44 seniors (86%) surveyed. (Tables 6 & 7)

TABLE 7

% OF RESPONDENTS IN JUNIOR AND SENIOR CLASSES FOR 1973-74 AND '74-'75 SURVEYS

YEAR OF SURVEY	JUNIORS	SENIORS	TOTAL
1973-74 (N=38)	71	29	100
1974-75 (N=59)	36	64	100

The 1973-74 student questionnaires were assigned identification code numbers to allow matching of questionnaire responses with precoded information about the respondent's class membership, sex, race, honor designation, and the number of clinics each had been observed in as part of this study.[23] Further, data collected during the clinical observations could be compared for responding students using the identification numbers. The same numbers were used to identify students observed in the field notes as well. The senior questionnaires of the 1974-75 survey were also precoded to enable matching of 1973-74 junior responses with the same respondent's questionnaire a year later.

Statistical analyses of the questionnaire data were performed using the SPSS program for computer analysis.

Observation of Student Behavior in the Dental School Clinic

The Observation Schedule

As part of the holistic approach to the study of norms in the dental school clinic, observations of actual

student behavior with patients in the school clinic were conducted by the investigator as participant observer. Each junior and senior student was to be observed while treating a patient in the operative dentistry, oral surgery, and periodontics clinics. Because of the limited operatory space available in the school, students are scheduled in the different specialty clinics for each of the ten weekly clinic sessions. (Fig. 2) A special assignment schedule

		JUNIORS	SENIORS
MONDAY	A.M.	----------	Oral Surgery
	P.M.	Oral Surgery	----------
TUESDAY	A.M.	Operative	Oral Surgery
	P.M.	Oral Surgery	----------
WEDNESDAY	A.M.	----------	----------
	P.M.	Periodontics	----------
THURSDAY	A.M.	Operative	----------
	P.M.	Operative & Oral Surg	----------
FRIDAY	A.M.	----------	Perio & Oral Surg
	P.M.	Oral Surgery	Operative & Perio

Fig. 2--Schedule for Junior and Senior Operative, Oral Surgery, and Periodontics During the 1973-74 Academic Year.

indicates when each student will rotate through the oral diagnosis clinic, endodontics, Dental Auxiliary Utilization training (DAU), oral surgery, the "special services" clinic, and serve an extramural hospital clerkship. An observation

schedule was constructed using the scheduled clinic periods and the special assignment schedule. Given the frequent rate of patient lateness and broken appointments and special assignments (e.g. endodontics taking precedence over regularly scheduled senior operative or periodontics), observing each student in the three desired clinics became impossible.

Observations were conducted during this period as the 1973-74 academic year represented the final year during which clinical training, in the last two of the four years of dental training, was organized in a "block" teaching system at Highbridge. In the block system, instruction in each technical dental specialty is provided independently from training in other specialties. During the 1974-75 academic year, the school adopted a "modular" teaching format. Now, faculty representing each of the specialties are present simultaneously on the clinic floor. Ideally, the student should be able to perform whichever type of treatment is indicated for his patient regardless of any former scheduling restrictions. Students now, theoretically, are responsible for the delivery of nearly all treatment required by their assigned patients instead of treatment in only one clinical specialty. The ultimate objective of this teaching format is the emphasis on a comprehensive approach to patient care.[24]

Between February and May, 1974, a total of 151 observations of students treating patients were recorded. (Table 8) The seven seniors assigned to honors specialty programs were eliminated from the observation schedule as they did

not participate in the regular student curriculum.

Fifty-six percent of the observations were of junior students, forty-four with seniors. (Table 8) Sixty-four were in the operative dentistry clinic, thirty-four in periodontics, and fifty-three in oral surgery. (Table 8)

TABLE 8

NUMBER OF STUDENTS IN EACH CLASS OBSERVED IN EACH OF THREE SPECIALTY CLINICS (IN PERCENTAGE)

	OPERATIVE (N=64)	PERIODONTICS (N=34)	ORAL SURGERY (N=53)	TOTAL OBSERVATIONS (N=151)
JUNIORS (N=45)	100	9	80	56
SENIORS (N=35)	54	86	49	44

Only nine students (11% of the population) were observed in all three clinics. Fifty-three (66%) were observed in two clinics, while eighteen (23%) were observed in only one of the three clinical specialties. (Table 9)

TABLE 9

NUMBER OF CLINICS EACH STUDENT WAS OBSERVED IN BY CLASS (IN PERCENTAGE)

		CLASS		
		Junior (N=45)	Senior (N=35)	Total (N=80)
NUMBER OF CLINICS	1	18	29	23
	2	75	54	66
	3	7	17	11
		100%	100%	100%

Observation and Recording

The observer wore a white laboratory coat, like that worn by other instructors in the clinic, and carried a notebook and pen. After the scheduled student was located in the clinic, the observer identified herself, explained briefly that she would be watching while the student treated his patient, and asked if the student expected his patient during that session (if the patient were not present). The student's questions about the study were answered briefly. They were told the researcher was interested in observing what happens in the clinic. They were assured of anonymity and, if they did not know the observer, that they were not being graded. They were further assured that no reports

about individual behavior would be given back to the clinical department or administration. Many students explained briefly to their patients who the observer was and what she was doing. Some introduced their patients to her. After introductions and any explanations, she would move a stool to a location which would permit visual and auditory observation of the interaction, while, hopefully, maintaining sufficient distance from the dental chair so as not to interfere or intervene with student, patient or instructor activity. The investigator remained for approximately an hour before moving to another student.

The original research design called for the use of a predesigned observation form for recording behavior. Each time behavior related to one of the categories of norms on the questionnaire was observed, it would be listed in the appropriate part of the form, along with comments about what personnel were present. This method also called for an immediate decision about whether or not the behavior was in conformity or violation of the norm and which norm was involved. It excluded other factors about the context of the incident. Instead, notes were made about what was occurring, with dialogue recorded verbatim (to the best of the recorder's ability), and notes about the presence of personnel, etc.

Following each day of observing, the notes were reviewed. Incidents which were related to specific norms were individually recorded on index cards. A different color

card was used for each of the three clinics. One card recorded the fact that an observation had been made for the student in the specific clinic, along with general comments about the observer's impressions of the overall incident. On the front of the card, and on the front of each card written up from the record of the observation for that student that day, the following information was listed: the student's identification number, which corresponded to the number assigned to the student's questionnaire; the sex and race of the student; date of the observation; time of day; the name of the primary instructor involved; whether the instructor was present at the time of the recorded incident; what procedure was being performed by the student; and how many times the student had been observed as part of the study. In addition, a brief description of the patient was noted including his sex, approximate age group, race, and whether or not it was his first visit with the student in the particular clinic. On each card on which an incident was cited, what occurred was recorded, including any observable sanction.

The cards were assigned to one of thirteen categories, eleven of which corresponded to selected norms. (Fig. 3) The two additional categories included miscellaneous incidents which were generally relevant and a final category labelled "Student Role: Identification With Patient." In the latter category, comments made by students related to their self-image were collected. While not directly related

BEHAVIORAL CATEGORY	CORRESPONDING QUESTIONNAIRE ITEMS
Oral Hygiene & Preventive Instruction	1 & 15
Rapport with Patients	2 & 7
Explanation of Treatment	3 & 10
Uncooperative Patient	4 & 14
Clinical Emphasis	5 & 11
Anxiety	6
Non-Verbal Communication	12
After-Effects & Home Care Instructions	8 & 16
Establishing Patient Trust	9 & 17
Use of Patient's Name	13 & 19
Management of Pain	18 & 20

Fig. 3--Categories of Behavioral Norms and Corresponding Questionnaire Items

to the present study, it is believed that the development of the professional self-image is an important element in the socialization process.[25]

The additional variables recorded on each card were intended to enable the analysis of the effect of these variables on conformity with normative expectations in the clinics.

A list was kept of which students had been observed in each clinic and the date of the observation. Thus, if a student scheduled to be observed on a particular day was absent or had no patient, another student not previously observed in that clinic could be observed.

NOTES

[1]See, for example, Alton K. Fisher, "The Inductrination of Dental Students with a Professional Attitude," Journal of Dental Education, 244 (1960), 38-41; Jack G. Hutton, Jr., "Attitudes of Dental Students Toward Dental Education and the Profession," Journal of Dental Education, 32 (1968), 296-305; Erwin L. Linn, "Service to Others and Economic Gain as Professional Objectives of Dental Students," Journal of Dental Education, 32 (1968), 75-81: Enrico L. Quarantelli, "The Dental Student: A Social Psychological Study" (unpublished Ph.D. dissertation, University of Chicago, 1959); David S. Steinberg, "Changes in Attitudes of Dental Students During their Professional Education," Journal of Dental Education, 37 (May, 1973), 36-41; Basil J. Sherlock and Richard T. Morris, Becoming a Dentist (Springfield, Illinois: Charles C. Thomas, 1972); Alice Fusillo and A. Stafford Metz, "Social Sciences and Dentistry: A Critical Bibliography, ed. by N. David Richards and Lois K. Cohen (Netherlands: Fédération Dentaire Internationale, 1971), pp. 15-67.

[2]Eliot Freidson, Patient Views of Medical Practice (New York: Russell Sage Foundation, 1961), p. 190.

[3]See Chapter V.

[4]Samuel W. Bloom and Robert N. Wilson, "Patient-Practitioner Relationships," in the Handbook of Medical Sociology, ed. by Freeman, Levine, and Reeder (2nd. ed., Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1972), p. 327; and Daniel J. Levinson, "Medical Education and the Theory of Adult Socialization," Journal of Health and Social Behavior, 8 (December, 1967), 253-265.

[5]See Appendix II.

[6]See Bernard Schoenberg, Helen F. Pettit, and Arthur C. Carr, eds., Teaching Psychosocial Aspects of Patient Care (New York: Columbia University Press, 1968).

[7]Jack P. Gibbs, "The Study of Norms," International Encyclopedia of the Social Sciences,11, 1968, 208.

[8]The statements of the leaders of dental education are collected in John E. Gurley, The Evolution of Dental Education (St. Louis, Missouri: American College of Dentists, 1960). Professional norms have been extracted from statements and publications of the professions and their official organizations as well. Merton, for example, cites a report from a committee of the Association of American Medical Colleges, "The Objectives of Undergraduate Medical Education," Journal of Medical Education, 28 (March, 1953), 57-59, as a source for identifying norms which are, in fact, similar to those gleaned through field observation by the researchers. In Robert K. Merton, George Reeder, and Patricia L. Kendall, eds., The Student-Physician (Cambridge: Harvard University Press, 1957), p. 72.

[9]Jerome Carlin, Lawyers' Ethics (New York: Russell Sage Foundation, 1966).

[10]William Martin, "Preferences for Types of Patients," in The Student-Physician, pp. 189-205.

[11]Howard S. Becker and Blanche Geer, "The Fate of Idealism in Medical School," American Sociological Review, 23: 50-56, February, 1958.

[12]Basil J. Sherlock and Richard T. Morris, Becoming a Dentist (Springfield, Illinois: Charles C. Thomas, 1972).

[13]"American Dental Association Principles of Ethics," American Dental Association, Chicago, Illinois, Section 2, "Service to the Public."

[14]Eliot Freidson, Profession of Medicine (New York: Dodd, Mead and Company, 1971), p. 186.

[15]It is noted that, as a part of the definition given for operative dentistry in an operative textbook, for example, "the prevention of disease" is included. See H. William Gilmore, Textbook of Operative Dentistry (Saint Louis: The C.V. Mosby Company, 1967), p. 1.

[16]Webster's Seventh New Collegiate Dictionary, 1963; See Emily Mumford, Interns: From Students to Physicians (Cambridge: Harvard University Press, 1970), pp. 186-191 for a discussion of rapport in the doctor-patient relationship.

[17]H. Beecher, Measurement of Subjective Responses (New York: Oxford University Press, 1959); H. Beecher, "Surgery as a Placebo," Journal of the American Medical Association, 176 (1961), 1102-1107; Ronald Melzack, The Puzzle of Pain (New York: Basic Books, 1973); and R.A. Sternbach, Pain: A Psychophysiological Analysis (New York: Academic Press, 1968).

[18] Ibid.

[19] While a department called "Interdisciplinary Correlations" was included in the school bulletin and faculty roster, the two members listed were known to no longer be members of the dental school faculty.

[20] See Appendix IV

[21] It should be noted that over 75% of the faculty is designated as "adjunct," teaching 1 to 2½ days per week. Those teaching one day per week are not paid and frequently changes. The faculty roster is constantly in a state of flux. Department secretaries cooperated in the investigation by mailing questionnaires to those faculty members included in the sample who were not expected to come to the school to teach. Given these considerations, a 64% return rate can be considered to represent an even greater proportion of the actual teaching faculty.

[22] See the description of the school's behavioral science course, the Human Behavior Seminar, in Chapter V.

[23] Sex and race were not included as variables in the data analysis because of the small numbers of women and non-white students enrolled in the school.

[24] See J. Essig (Shub), D. Diserens, and S. Wotman, "Evaluation of the Effects of a New Program of Clinical Teaching on Students' Attitudes" (paper presented at the 53rd annual meeting of the American Association of Dental Schools, Miami Beach, Florida, March, 1976).

[25] See Mary Jean Huntington, "The Development of a Professional Self-Image," in The Student-Physician, ed. by Robert K. Merton, George Reader, and Patricia L. Kendall, pp. 179-187.

CHAPTER V

THE RESEARCH SETTING

Introduction

Features of the environment in which the students receive their professional training are important variables affecting the students' perceptions of the social environment and, therefore, their perceptions of prevailing norms. The dental school environment, which includes its physical setting, curriculum, personnel, and position in a large medical center and community, have an important influence on the behavior of the dental student. These components of the students' environment must be examined to determine how they function to influence the students' perception of their status and role relationships in the school setting. The organization of the dental school curriculum directly determines how the students' experiences are structured. This plays a vital role in determining the students' construction of their social reality and thus their behavior in this reality.

The discussion which follows is based on an analysis of data collected at one dental school, the Highbridge School of Dentistry. This dental school is part of a private, university-affiliated medical center located in a large city in the northeastern United States. The school offers a four-

year accredited program leading to the fulfillment of requirements for the D.D.S. degree. The school also offers programs leading to Bachelor of Science and Master's degrees in Dental Hygiene as well as postdoctoral programs in dental specialties.

During the first year of the four-year dental training curriculum, the dental student takes courses in required basic natural sciences together with those students enrolled in the university medical school. Along with these, the dental students are required to take three additional courses: "Introduction to Dentistry," a survey orientation course; a series of "correlation clinics" designed to integrate medical and dental clinical subjects with the basic sciences; and a course entitled "Human Behavior." During the second year, the student is given preclinical dental training, the Human Behavior Seminar, and the completion of the basic natural science courses. The third year is primarily clinical, with training in all phases of dentistry. During the fourth year, while completing their undergraduate clinical training, students are given an opportunity to select elective courses in specialty areas of dentistry. Honors programs are offered to selected students considered highly qualified.[1] Students selected for honors programs in the clinical specialties complete their postgraduate training in their chosen field in one year following graduation instead of two. Those enrolled in the honors program in Public Health can complete requirements for a Masters in Public Health degree offered in conjunction

with the university School of Public Health.

Historical Background

In 1916, when the first dentistry students were admitted to the university's medical school, Highbridge School of Dentistry was founded. This school is described in the "Highbridge Alumni News" of March 30, 1928, as "one of the first schools in the country to take part in the movement to raise the standards of dental education." Following the recommendations of reports on dental education, the trustees and faculty of the Highbridge Medical College passed resolutions recommending that a school of dentistry be established in the university once financial aid became available. Such aid was forthcoming in the form of grants to the school. Among the first of these grants was a $125,000 gift for the opening of the Highbridge Dental Infirmary.

Between 1890 and 1916, the length of the average dental course was three years. In 1916, the Association of University Schools passed a resolution providing for the establishment of four-year dental courses in those schools belonging to the association. A three-year dental curriculum was again utilized during World War II to increase the number of dentists available for the armed services.

Support for the enriched preparation of dental practitioners came from several places. The report in the "Highbridge Alumni News" states that "demand for improved dental education came largely as the result of the realization that dentistry was closely related to medicine, and that prepara-

tion for it should be of a more professional nature than was then provided by the various independent dental schools."

> Physicians were beginning to realize the importance of examination of the mouth and teeth as part of the basis for diagnosis, but they hesitated to consult with dentists who had no general knowledge of the human system. Many of the better class of dentists, particularly those who had had medical training, also realized this condition. Coupled with this feeling, was the public clamor for better dentistry.

Among those in favor of the establishment of a new dental school was a 1911 graduate of Highbridge Medical College, who was then in charge of the dental department of the Gotham Clinic, the out-patient department of the Highbridge Medical Center.[2] A committee composed of the dean and three medical school faculty members, the director of the dental department of the Gotham Clinic, and fifteen dental practitioners was appointed to develop the four-year curriculum. As a result, in the spring of 1917, the Trustees of the University provided for the establishment of a School of Dentistry. In 1917, the Highbridge Post-graduate School of Dentistry, newly equipped and prepared to accept its first student enrollment, and the Highbridge School of Dental Hygiene were absorbed by the university. In the spring of 1920, the School of Dentistry took possession of a newly completed building adjacent to the School of Medicine and the Gotham Clinic.

The apparent initial support given to the dental school by the University was short-lived. In 1926, when the medical school was to move to its present location, the University planned to have the dental school remain where it

was, over thirty blocks away. It was only following an appeal from the Carnegie Foundation, emphasizing the importance of continued training for dental practitioners in the medical sciences and oral medicine, that the dental school was physically incorporated into the present complex. The Carnegie Foundation was instrumental in stressing the importance of oral health and the relationship between oral infections and overall physical health. In the move from mechanic to doctor, the dentist came to treat infection and emphasize the importance of oral hygiene. To do so, dental education had to expand to include the broad-based training emphasized in medical education as well.

The Training Setting

The curriculum of the dental school, at the time of this research, was organized as a four-year program. The first year consists of courses in the "basic sciences," taught to both medical and dental students by the medical school basic science faculty. The course content and scheduling are the responsibility of the medical school faculty and are considered to be oriented to the requirements of the medical students. With the exception of three courses given by the dental faculty, during the first year of dental school, then, students are "medical students" attending classes at the medical school.

During the second year, students receive their preclinical dental training. This includes laboratory courses in dental techniques and sciences, and the second portion of

the Human Behavior Course. During the spring of the second year, students begin treating patients in the Periodontics clinic. At the end of the second year, during a six-week summer session, students are assigned principally to the clinics, as they are during the third and fourth years. In the last two years of training, in addition to their regular clinic assignments, students participate in externship assignments, electives, and, if selected, begin honors training in a specialty area.

The Highbridge College of Medicine is part of a large metropolitan medical center. It consists of two buildings, the newer of which also houses the allied health departments of the university. These are adjacent to the Highbridge Hospital building, an in-patient hospital facility, and the Gotham Clinic building for out-patient and emergency services. Dental services are only available to the public on an out-patient basis through the clinic building.[3] Passage between each of the buildings is possible without exiting to the street. Beyond the shared basic science instruction, however, the dental school has little contact with the other hospital care and teaching facilities, with the exception of the psychiatric hospital.

There was no hospital dental department and, therefore, no dental residencies at Highbridge Hospital until the summer of 1975. Medical students receive no training in oral diseases or dental care from the dental faculty. Emergency patients coming to the hospital are referred to the dental

clinic only during the hours when the school is open. When the school clinic is closed, patients are referred to other hospitals in the city for emergency dental care. Extramural rotations are arranged for dental students through the hospital dental programs at other hospitals affiliated with the same university.

The Gotham Clinic: Floors Seven Through Nine

The dental school itself occupies three floors, seven, eight, and nine, of the Gotham Clinic building. On the seventh floor, several division offices,[4] classrooms, locker and lounge areas (for hygiene students and dental assistants), the dental hygiene department, the dental supply store, and the x-ray and oral surgery clinics are located. Additional classroom space is utilized by the school two blocks away in an old office building. The payroll department offices and admissions office are housed here. Several rooms are used for classes for dental assistants and the Human Behavior course. As seminar rooms are in short supply in the medical center complex, the Human Behavior course is usually assigned rooms in the annex building. This makes it necessary for students and faculty participating in the course to leave the medical center complex and walk over to the annex. Thus the behavioral science courses are removed physically as well as temporally from the students' dental training.

The eighth floor of the Gotham Clinic houses the patient registration, waiting, and record areas; an x-ray room; the diagnosis and D.A.U.[5] clinics; a conference room;

junior and senior laboratories; and the two main wings of the school's clinic. One wing is assigned annually to seniors, one to juniors, with one area of the present junior wing reserved for graduate students. (These assignments are reversed each year.)

A student's daily clinic chair assignment is posted on a bulletin board at the entrance to the clinic. Each student's instruments are stored in a locked portable cabinet which can be rolled to the assigned dental chair and power unit. Stools for the students', instructors', or assistants' use are scattered around the clinic floor.

In most other dental schools in the country, each clinical specialty division is assigned a space of its own. Here, due to the severe limits on physical space, each class is assigned to a physical area. The teaching staff of the various specialties are assigned to the clinic at different times on different days. Various faculties occupy these clinic wings during each of the scheduled morning and afternoon clinic sessions. Juniors treat periodontic patients, for example, on Wednesday afternoons and operative patients on Tuesday mornings and all day on Thursday. Seniors perform periodontal treatment all day on Fridays and operative only on Friday afternoons. This system is compatible with the predominantly part-time faculty employed. With such scheduling of clinical treatment, care is not available to patients simultaneously in each specialty area. Thus the possible scheduling of patients requiring various types of treatment

is restricted to those periods allocated for specific types of treatment by the school.

The ninth floor contains four small clinic areas. One is used by dental hygiene students; one by the pedodontics and orthodontics departments; one for disabled and cerebral palsy patients; and the fourth as a "special care clinic." There are also the remaining division offices,[6] locker areas for students, the sophomore technique laboratory, the student lounge, and the dental auxiliary department offices and operatories.

Physically, each of the three clinic areas on the three floors is quite different from the others. The oral surgery clinic is tiled in a "hospital green" color. There are three operatories: one with two chairs, used for general anesthesia procedures, with an adjacent room containing beds for post-operative recovery;a second with three chairs; and a third, separated from the second by a sterilization and supply room, with two additional dental chairs. Unlike the other clinic areas, the oral surgery operatories have dental-type chairs without the dental equipment units adjacent. They do have overhead surgical lights and stainless steel bracket tables for instruments. There are sinks, tables of sterile supplies, stainless steel cabinets, and windows simply covered with shades. The room used for procedures performed with general anesthesia has tanks of anesthetic gas and oxygen as well as chairs equipped with straps to hold the patient and, if necessary, an intravenous set-up in place. There

are curtains in the larger of the rooms to enclose any of the chairs. The instructors here wear long, green surgical gowns (instead of the white laboratory coats worn in the other clinics) and they, as well as the students, wear caps. Face masks appear when someone has a cold. Female dental assistants and trainees wear white nurses uniforms and caps.

The eighth floor clinic areas were renovated in 1973. New textured wall coverings and seventy-eight modern beige dental chairs and units were installed. The area is bright, compared with the other clinic areas, open and well lit. There is a small waiting area, containing several plastic chairs and a few photographs, located across from the reception desk at the clinic entrance. Large signs in English and Spanish designate the reception desk. Music from a radio is broadcast throughout the floor via an intercom system.

The clinic area on the eighth floor is the most modern of any in the school. The chairs are arranged in rows extending the length of the floor, unseparated by any partition, giving the room the look of an assembly line. Students can converse with one another. Anyone in the room can easily observe what is happening in almost any area of the room. Students are assigned rolling instrument cabinets, panelled in wood-tone formica, which they can easily bring over to their daily seat assignment. There are sinks located against the support beams at intervals in the room where students and instructors can wash when treating a patient. At one end of the room, there is a supply room from which assistants

dispense anesthesia and other supplies to students presenting faculty-authorized requesition slips.

In contrast, the clinical areas on the ninth floor are furnished with antiquated dental chairs and wooden benches. This area, set apart from the mainstream of school activity, is reserved for training dental hygienists and patients coming for pedodontic and orthodontic care and treatment of handicapped patients.

Each of the three floors can be reached using the clinic elevators, or any elevator within the complex of adjacent buildings. The Gotham Clinic elevators are attended by elevator operators. The other elevators in the medical center are self service. A staircase is frequently utilized by students and instructors, or patients wishing access to an adjacent floor of the dental school.

Some members of the faculty say they are dissatisfied with the present facilities and the limitations they impose on training. These instructors have been instrumental in seeking funding for innovative training programs such as Dental Auxiliary Utilization and T.E.A.M. dentistry. Further, at the time of the study, plans existed to renovate the entire three floors using funds obtained from the Federal government. Additional classroom and office space would become available following the completion of the new medical school library building, then under construction. In the renovation plans, each of the three floors of the dental school was to be remodelled in the form of three nearly identical clinics. Unlike most other dental schools, each clinic area will not be

assigned to a major clinical specialty. Instead, each will serve as a clinic module, similar to a group practice. The assumption of the faculty involved in planning for the renovation is that this arrangement will permit more continuity in patient care. Patients will be assigned to a student in a module for all required treatment, instead of receiving separate assignments to each of several students in appropriate specialty clinics. This new clinical concept appears consistent with comprehensive patient care, suggesting a commitment from the school to this approach for the future.

Clinic Patients

Becoming a patient

A person wishing to become a patient at Highbridge School of Dentistry's clinic must come to the eighth floor of the Gotham Clinic and register at the reception desk. There, prospective patients are greeted by Ms. Braun, a physically large woman, wearing a white uniform, with blond hair worn in a knot upon her head. She is known in the school as "Chief Sitting Bull." The clinic director himself has complained that it is impossible, due to union restrictions, to fire her despite complaints from students and patients. After a prospective patient completes the required forms and pays a registration fee, an appointment is made for radiographs and diagnosis. Patients are diagnosed in the oral diagnosis clinic by instructors and students on rotation in that clinic. A treatment plan is prepared. The patient's chart is then made available to students seeking patients

in those clinics in which it has been determined the patient requires care. When a student first sees a patient in one of the specialty clinics, a new treatment plan may be designed. This is because the clinic's faculty may decide a different treatment plan is desirable, the patient may have sought care from another dentist in the interim between his original diagnosis and first treatment appointment, or the condition of the patient's mouth itself may have changed.

Reasons for seeking dental care at Highbridge

Surveys conducted by the dental school faculty show that patients come to the dental school clinic for a variety of reasons. As is true of patients selecting university-affiliated hospitals for their medical care, patients associate the dental school clinic with the prestige and reputation of the medical center and university of which it is a part. They expect excellent quality treatment under the supervision of an expert faculty. The cost for routine care in the school clinic is comparable or slightly lower than that of private care. Specialty care in prosthetics, orthodontics, endodontics, and periodontics can be considerably less expensive than in private practice. In order to take advantage of the care offered by the dental school, the patient must be able to meet appointments during the days when the school is open. Treatment provided by dental students takes a great deal longer than it would in private practice. Many of the patients are unemployed, elderly, or persons whose schedules permit them to spend extensive

periods each week at the school, such as students or those in the arts. Some patients come to the clinic because of their dissatisfaction with private dental practitioners. Some maintain long affiliations with the school for their care, returning year after year.

Description of patient population observed

Of the one hundred and sixteen patients observed receiving treatment in the operative, oral surgery, and periodontics clinics in this study, 34% were men, 66% were women. (Table 10) Forty-five percent were white, 35% black, and 20% Oriental or Hispanic. (Table 11) Only eight percent were twelve years old or younger, 6% were teenagers,[7] 33% young adults, 28% middle-age adults, and 25% were elderly. (Tables 10 & 11).Tables 10 and 11 provide a further description of the patients observed receiving treatment during the period of data collection.

TABLE 10

STRATIFICATION OF PATIENT SAMPLE BY AGE AND SEX
(IN PERCENTAGES)

AGE GROUP	SEX		TOTAL (N=116)
	MALE (N=40)	FEMALE (N=76)	
Children and Teenagers (N=16)	7	7	14
Adults (N=71)	20	41	61
Elderly (N=29)	8	17	25
TOTAL	34	66	100

TABLE 11

RACE OF PATIENTS OBSERVED BY AGE GROUP
(IN PERCENTAGES)

RACIAL GROUP	AGE GROUP			TOTAL (N=116)
	YOUNG (N=16)	ADULT (N=71)	ELDERLY (N=29)	
White (N=52)	5	28	11	45
Black (N=41)	3	22	10	35
Other* (N=23)	6	10	3	20
Total	14	61	25	100

*"Other" includes both Oriental and Hispanic patients. Due to the small number of patients in these groups, they were combined.

Teaching The Art and Science of Dentistry: The Clinical Divisions

The education of the dental student takes place within the physical setting described above. This setting is organized to allow for the nearly autonomous functioning of each clinical department. Clinic patients cannot receive the integrated, comprehensive care available in private practice. The student's attention is focused on the type of procedure to be performed, practiced, and mastered, instead of on the patient or the treatment plan in its entirety. In such an environment, the emphasis is on the technical procedure. What effect this has on the interpersonal and humane aspects of treatment is now examined.

It is believed by the school administration that this training modality effectively teaches students the technical aspects of dentistry. The dental school is satisfied with the quality of its students' clinical performance both in the school clinic and on their regional licensure boards. That this modality may not be suitable for training in the interpersonal aspects of patient care is evidenced in several problems observed.

Training in the interpersonal aspects of care, pain control, patient and practice management, and preventive dentistry is included in the curriculum. Much as the technical skills are included in the curriculum through the creation of distinct departments, so divisions were set up in

the dental school responsible for the areas of community dentistry, preventive dentistry, and behavioral science. As they have been set up as distinct divisions, their effect in integrating elements of community-oriented care, preventive dentistry, and behavioral science into the clinical practice within the dental school has, as will be shown, been negligible.

Teaching Psychosocial Aspects of Patient Care: The Human Behavior Course

Teaching Comprehensive Care

If the new dental curriculum designed to professionalize the technical field of dentistry was to include training in the interpersonal aspects of providing dental care, a method for incorporating this instruction had to be devised. To teach the techniques of dental care, courses in the principles of dental technique and restorative materials and oral anatomy are offered. These are followed by extended opportunities for supervised practice. To teach the scientific bases for oral health care, in the context of the health of the entire human body, didactic courses in the physical and biological sciences are offered. It is assumed that, as in other professional training, didactic courses in psychiatry were originally introduced in the curriculum to teach students about patient and dentist behavior in the treatment setting. Techniques required for managing patient behavior would be acquired through practice. Such techniques, however, are of secondary importance when compared with the fundamental scientific and technical skills necessary to

perform dental procedures. The effect of this type of training has not been satisfactory for a variety of reasons now to be discussed.

In the late sixties, a course in "human behavior" was introduced at the dental school. This course was an extension of a course developed with similar objectives in the School of Nursing by the Department of Psychiatry.[8] It supplanted a series of lectures in psychiatry previously offered to dental students in an effort to provide knowledge of fundamental psychiatric theory and symptom classification deemed relevant to an understanding of patient behavior.

As in other medical fields, the focus and methods of psychiatric practice had undergone changes themselves in the fifties. Its theoretical orientation expanded from consideration of the individual patient's behavior in isolation from his environment to include a focus on the transactional elements characteristic of the relationship between therapist and patient.[9] Building on the work of Harry Stack Sullivan, efforts to understand aspects of the therapeutic relationship were added to the processes of labelling and analysis of individual behavior in psychiatry.[10] "Arguing that psychiatry is the study of interpersonal relations and, therefore, that the psychiatrist should be concerned with what goes on between people rather than primarily with the intrapsychic, his [Harry Stack Sullivan's] work proved to be very influential in directing attention to the social aspects of mental illness."[11] Thus courses in "Psychiatry" concerned only with

intrapsychic phenomena were limited in their scope. The orientation of courses for nursing, medical, and dental students, while slower to adjust to changing conceptualizations, were revised to provide some understanding of the effect of the context on patient behavior, and the role of the members of the health care team as a part of that environmental context.

Following the changes in the delivery of health care after World War Two, there was a shift in the emphasis in nursing and medical schools toward teaching "comprehensive patient care."

> Comprehensive medical care has been defined as the preservation of health and the prevention as well as the cure of disease. It means medical supervision which is sufficiently long to bring the patient through convalescence and rehabilitation to an optimal state of health and productivity.[12]

Evidence of this change in emphasis was displayed in new directions of teaching and research concerned with the patient, his experience, and his environment--prior to, during, and after treatment--and how these affect his condition.

Of particular concern are the patient's relationships with the personnel and institutions of the health professions.[13] In professional training, lectures on topics such as "anxiety" and "schizophrenia" were supplanted by various courses attempting to provide a more comprehensive view of patient behavior in the context of the professional-client relationship. One course of this type was the one begun in the school of nursing. The format of this course was an interdisciplinary seminar for the study of the psychosocial aspects

of patient care.[14]

The approach of the school, then, was to create a new department to handle training in the area of interpersonal aspects of patient care. The emphasis was on the scientific nature of the topic--teaching principles in a setting removed from the context of clinical training.

For dentistry, specifically, comprehensive care involves an emphasis on prevention of disease and maintenance of oral health. Just as training for comprehensive care in medicine necessitated the inclusion of a wider selection of topics from the social sciences, so in dentistry curricula are being expanded with the objective of presenting a view of the patient as an individual, rather than a dental condition. A new image of the dentist's role is implicit in the approach. A dentist concerned with prevention must be skilled in educating and motivating patients. This requires expertise in interactional skills not before included in the realm of the technique of dentistry.

Dworkin has pointed out that while understanding of the causes and treatments for the major dental diseases has increased tremendously over the past thirty years, the prevalence of dental disease has not diminished appreciably. Further, dentistry has failed to convert large segments of the population towards "greater acceptance of its current messages that dental disease can be largely prevented and that treatment can be provided nontraumatically."[15] From this, he suggests that dental education should have two

major objectives. "On the one hand, we should aim to teach the 'how-come' and 'what to-do' regarding oral diseases" and "we should be equally concerned with teaching how to create environments that will allow all typed people [sic] to submit themselves to dental treatment in accordance with our recommendations."[16] Pointing out the need for behavioral science content in the dental curriculum to enable students to create these favorable environments, i.e. doctor-patient relationships, Dworkin continues, "The behavioral sciences have as their domain an examination of the complex interactions between people and their environments and dental education clearly suffers from lack of this kind of input."[17]

The Human Behavior Course

At the Highbridge School of Dentistry, the behavioral science course, called the Human Behavior Seminar, is offered to freshman and sophomore dental students. The course for the freshman class meets for an hour and a half every Wednesday morning, from November through May. The class is divided into three randomly selected groups which meet as individual seminars.[18] Each has a teaching team consisting of a psychiatrist, social scientist (usually a psychologist or sociologist), a dentist from private practice, and a dentist from the school faculty. Attendance is the only formal requirement of the course and students receive a "pass" or "fail" grade at the end on the basis of attendance.

The sophomore groups also meet for an hour and a half on Wednesday mornings. Their course begins in January and

continues through May. There is an additional six week summer session for sophomores, from late May through the early part of July, concurrent with their first general clinic experience with patients.

The seminars are loosely structured. Students are encouraged to talk about their experiences and reactions to school, life in general, dentistry, career planning, etc. The faculty is present to help lead and direct the discussion, point out underlying themes, give support and reassurance, and provide information, as relevant, from their own experience and expertise. There is some disagreement among members of the faculty about the content, objectives and structure of the course. This is usually voiced during the meetings of the faculty held sporadically throughout the year.

Nursing students take the analogous course while engaged in providing supervised care to patients. Their experiences provide a basis for group discussion, and the group provides a supportive and receptive outlet for the emotional experiences occurring on the wards. Unlike nursing students, students in the dental school are not treating patients, or even participating in courses directly related to dentistry, during much of the period when they are enrolled in the Human Behavior course.

In the last two years of dental school, when almost all of the students' time is spent treating clinic patients, there is no formal instruction of this type. It is assumed that instruction in patient management at the stage of clinical training will be gained through experience,

carried over from the first two years of Human Behavior, or provided by clinical instructors through direct instruction or example on the clinic floor.

Student Responses to the Course

The Human Behavior faculty believe the course has been unpopular with students, as reflected in their often skeptical comments and lack of attendance at seminars, particularly when examinations are scheduled in other courses. They have suggested a variety of reasons why it is difficult for students to accept the importance and relevance of the Human Behavior course during the first two years of dental school.[19]

First, students do not as yet have a complete image of what the role of dentist involves. Most only know about dentistry through their own experiences as patients, from relatives in the profession, and from portrayals of the profession in the media which represent popular stereotypes.[20] These experiences and stereotypes, by and large, represent an antiquated dentistry--dentistry focused on the technical, restorative procedures, emphasizing a mechanical-technical approach in which preventive concepts and the "comprehensive" individualization of care were rarely heard of. Thus the student comes to dental school expecting training in the things dentists do: operating a drill, giving an injection, extracting a tooth, and preparing a denture. With these expectations and emphasis, the student questions the relevance of the extensive, medically oriented basic science curriculum and, especially, a discussion course about human behavior.

Second, the first year of dental school is spent in courses run in conjunction with the medical school. First year medical and dental students are all first year medical students, in essence. However, the dental students are discriminated from the medical students in a variety of ways by the medical students and faculty. Some students resent being selected out to take a "dental course." The first year is didactic and highly competitive. Some students feel a course with no numerical grade is of less importance. There are no meaningful sanctions imposed by the school or from peers for missed Human Behavior sessions. Now that attendance has been required, students attend more regularly, but many feel that such a course can be skipped when one is faced with an examination in a graded course.

In his discussion of the experience of student nurses, Davis identifies six successive stages through which students "come to discard the pronounced lay imagery they bring with them for these school-approved definitions and perspectives on nursing practice."[21] These resemble the stages dental students have been observed to pass through during their experience of the same subjective process. In the first stage, "initial innocence," Davis describes a disillusionment with the profession occurring as the students' preconceived notions about the profession, their "lay imagery," clashes with the conception presented in their early exposure to professional school.

"While they look forward eagerly to mastering such 'practical' techniques and procedures as the giving of

injections, the preparation and administration of medications, or the operation of a catheter, they are enjoined instead to go onto the wards and 'observe' patients and learn how to 'communicate' with them." As one student is quoted saying, "All that other stuff on communication and psychological care is just so much fluff."[22]

So the dental student experiences a similar disillusionment with the initial experiences in the dental school, both in the exposure to the medical school basic science curriculum and the dental school's Human Behavior course.

In contrast with the first year, during the second year, students switch from a predominantly scientific medical curriculum to a predominantly technical dental curriculum. They move from the lecture hall, library and science laboratories to the technique laboratory. Physically, the setting of their education changes from the medical to the dental school. From a period of concentration on the entire human anatomy and physiology, the curriculum focus narrows to the tooth and materials used in restoring asthetics and function. The role of the dentist changes from physician to technician. It is difficult for some students to consider problems associated with dentist-patient interactions while providing treatment for mannequin patients and already extracted teeth.

Students develop the dexterity needed to perform dental treatment at varying rates. Some find they immediately have sufficient skill and dexterity to master dental techniques.

Others develop equal skill through practice over time. Some, concerned with maintaining their grade averages, find they cannot keep up with their classmates as easily as they had during the first year. The typical dental student has been very successful academically throughout high school and college. His competitiveness enabled him to reach professional school. Some, accustomed to achieving success in academic courses, become anxious when confronted with a completely new type of learning skill which they are unable to master immediately. They concentrate their efforts on perfecting these skills, often sacrificing time from other areas of the curriculum as well as their personal lives.

Some students are uncomfortable with the format of the behavioral science course. The lack of formal structure and requirements, the apparently normless situation, creates an atmosphere of anomie which, when contrasted with the highly structured basic science courses, is difficult for them to adjust to. Some are unhappy with the nature of the topics covered in the course. They are not accustomed to being called upon to consider their own feelings and behavior, especially in the presence of a psychiatrist. Others express dissatisfaction with a course which raises questions instead of providing definite answers which the student can memorize and then report back on an examination.

Lastly, it should be pointed out that dental education presents a sharp contrast to medical education with regard to "training for uncertainty."[23] Students see a limited range

of dental problems during the two-year period of clinical experience. Patients are carefully screened both for the appropriate type of dental condition and behavioral characteristics. Patients who might present the slightest management problems are routinely eliminated from the patient roster. Incoming patients are made aware that the clinic is primarily a teaching institution and that they may not even be accepted for treatment. Undergraduate students do not treat or participate in the special care clinic which provides care for disorders of the temperomandibular joint. These disorders are viewed as arising from stress, and have psychological components.[24] A student could conceivably graduate from dental school believing most treatment planning and diagnoses in dentistry are straightforward and objectively predetermined. In such an environment, a course which involves the realm of uncertainty and suggests (while courses which may, at the time, have greater credibility do not) that interactions with patients will not be simple and certain, without presenting a blue-print for how to manage all situations, is destined to be discomforting for many students.

Summary

Dentistry began as a field in which technical skills were predominant. These have been refined and supplemented over the past century by research in the technical as well as the physical and behavioral sciences. New discoveries were slow to be incorporated into the corpus of knowledge of the field, thus inhibiting the acceptance of dentistry as a

profession.

One obstacle to the incorporation of these discoveries, and to the professionalization of the field, was the state of dental training. At the turn of the century, dental education in the United States was under the control of proprietary institutions. Following the recommendations of the Gies report, dental education was brought under the auspices of the universities, along with medical education.

With the infusion of knowledge from the physical sciences, dentistry's status as a legitimate health profession developed. Despite apparent satisfaction with the modern dental school's ability to provide training in the physical sciences and fundamental technical skills of dentistry, its success in training dentists adept in the interpersonal skills of health care delivery seemed questionnable. To remedy this deficiency the professional schools brought in courses developed for professional students in psychiatry and the behavioral sciences. The introduction of such courses followed studies of the attitudinal characteristics of dental students. The dentist's deficiencies with regard to interpersonal skills were seen as rooted in the personalities of those recruited into the profession.

However, this attempt to, in essence, routinize training in interpersonal skills in a rational way can be considered unsatisfactory. This is indicated by the continuing attempts of the dental schools to address the same problem, through a variety of means. However, all derive from the same premise--that failure lies with the students and the courses--not with

the emphasis of the students' clinical training and faculty role models.

Responding to the failure of the behavioral science courses to provide adequate training in these interpersonal skills, and again citing the basis for the failure in the psychological and cultural characteristics of the dental students, the schools have turned their attention to their recruitment policies and to improving their behavioral sciences courses.

One reason for the failure of such programs, it is suggested (if they, in fact, have failed),is that knowledge of behavioral principles and interpersonal skills, unlike technical and scientific knowledge, may contradict assumptions the students bring about behavior and motivation and may conflict with their attitudes about the roles of dentist and patient. Further, reinforcement of behavior consistent with the knowledge presented is absent from the remaining training the students receive. The potential effect of the environment on the attitudes that are reinforced or acquired by the student has been ignored. The relationship between knowledge or attitudes and behavior is problematic. [25] Given one's commitment to any values or norms, the conditions under which conformity with such norms is required or appropriate may not always be clearly or consistently specified. One's perception or one's definition of the situation, will ultimately determine behavior. In other words, whether the dental school clinic environment itself is conducive to the application of

techniques and attitudes supported in the behavioral science courses is questionable. In fact, it would appear that the attitudes and norms transmitted in the Human Behavior Course run counter to the norms for the dentist's role in the school clinic. If the norms in the clinic setting conflict with those for the interpersonal skills involved in patient care, it is likely that students will appear inept at such skills in such a setting.

NOTES

[1]Honors programs are offered in endodontics, orthodontics, orofacial development, pedodontics, periodontics, research, and public health.

[2]The background of the dental school is briefly described in a volume compiled in the late 1920's by a faculty member. This work was intended to advertise the progress of the dental school in meeting reforms to the school's benefactors. In the report, the potential of the school to provide new services in the city to dental patients and, in particular, of the clinic to provide care for "persons of moderate income" were stated objectives of the new school.

[3]Hospitalized patients requiring emergency dental treatment are brought to the oral surgery clinic on the seventh floor of the Gotham Clinic. Dental treatment is available to patients in the neurological and psychiatric hospitals in the medical center complex. Their facilities are staffed by members of the dental school faculty.

[4]Oral surgery, Office of Education & Behavioral Science, periodontics, preventive dentistry, community dentistry, and endodontics.

[5]Dental Auxiliary Utilization and T.E.A.M. (Training for Expanded-Duty Auxiliary Management) Dentistry.

[6]Orthodontics, pedodontics, operative dentistry, prosthetics.

[7]The small number of younger patients observed is a function of the fact that children and teenagers are segregated from the adult clinic population for treatment in the pedodontics department, which specializes in dentistry for children. While this investigation did not include a study of the pedodontics clinic, some children were seen in the oral surgery clinic where extractions are performed for all patients, regardless of age. The only "handicapped" patients observed were being treated in the oral surgery clinic as well. All disabled or chronically ill patients are routinely treated through the facilities of the "special care clinic" to segregate them from the regular clinic. Extractions, however, and procedures requiring the use of general anesthesia, are performed in the oral surgery clinic routinely.

[8]See Bernard Schoenberg, Helen F. Pettit, and Arthur Carr, eds., Teaching Psychosocial Aspects of Patient Care (New York: Columbia University Press, 1968).

[9]Changes in the orientation of psychiatric care and research followed the work of Harry Stack Sullivan. See Harry Stack Sullivan, "Socio-Psychiatric Research: Its Implications for the Schizophrenia Problem and for Mental Hygiene," American Journal of Psychiatry, 10 (May, 1931), 977-991.

[10]See Samuel W. Bloom, The Doctor and His Patient (New York: Free Press, 1965), Chapter 8.

[11]Ibid., p. 201.

[12]Merton, et al., eds., The Student-Physician, (Cambridge: Harvard University Press, 1957), p. 81.

[13]Additional evidence of the changing emphasis in medical care and its impact on professional education is provided by the incorporation of behavioral sciences into the National Boards of medicine and dentistry.

[14]See Schoenberg, et al., eds., Teaching Psychosocial Aspects of Patient Care.

[15]Samuel F. Dworkin, "Behavioral Sciences in Dental Education: Broad Purposes and Educational Objectives," Journal of Dental Education, 38 (1974), 204.

[16]Ibid.

[17]Ibid., p. 205. Additional evidence of the growing response to this need in dental education is reflected by the scheduling of a meeting of behavioral science instructors at the meetings of the American Association of Dental Schools, beginning in Atlanta in the spring of 1974, and the formation of "Behavioral Scientists in Dental Research" as part of the International Association for Dental Research.

[18]The size of the freshman class increased to 54 students, resulting in the assignment of 18 students to each group in the 1973-74 academic year. Four groups were planned for the 1974-75 academic year, and five for the 1976-77 classes to decrease the size of future sophomore and freshman groups to 12.

[19]Many junior and senior dental students have asked why the course is not given during the clinical portion of their training, when more claim they are able to appreciate its relevance to their experience and "enjoy" it in a less pressured atmosphere.

[20]For a discussion of the dental student's perception of the public's views of dentistry, see Enrico L. Quarantelli, "The Dental Student Image of the Dentist-Patient Relationship," The American Journal of Public Health, 59 (September, 1961), 1312-1319.

[21]Fred Davis, "Professional Socialization as Subjective Experience: The Process of Doctrinal Conversion Among Student Nurses," in Institutions and the Person, ed. by Howard S. Becker, et al. (Chicago: Aldine Publishing Company, 1968), p. 241.

[22]Ibid., p. 242.

[23]See Renee C. Fox, "Training for Uncertainty," in The Student-Physician, ed. by Robert K. Merton, et al., especially pp. 158-163.

[24]See Joseph J. Marbach and Samuel F. Dworkin, "Chronic MPD, Group Therapy, and Psychodynamics," Journal of the American Dental Association, 90 (April, 1975), 827-833); Daniel M. Laskin, "Etiology of the Pain-Dysfunction Syndrome," Journal of the American Dental Association, 79 (July, 1969), 147-153; and Joseph J. Marbach, "A Holistic Approach to the Treatment of Facial Pain," Alpha Omegan, 69 (December, 1976).

[25]See Milton Rokeach, Beliefs, Attitudes, and Values (San Francisco: Jossey-Bass, Inc., 1968), especially pp. 109-155.

PART II

NORMS FOR THE DENTIST-PATIENT RELATIONSHIP IN THE DENTAL SCHOOL

PART II

NORMS FOR THE DENTIST-PATIENT RELATIONSHIP IN THE DENTAL SCHOOL

Introduction

To determine the extent and nature of compliance with the norms discussed above, junior and senior dental students were observed while treating patients in each of three clinical areas: operative dentistry, oral surgery, and periodontics. This permitted comparisons of norm compliance both between classes and between clinics. A pattern consistent with the theoretical framework of socialization, in which role development, including attitude formation, progresses vertically over the training period, was not observed. In both the attitude survey and actual observations, no significant differences were observed between junior and senior students. Instead, a pattern more consistent with the propositions of symbolic interactionism and conflict theory emerged. While there were similarities in the student-patient relationships observed, distinct differences were noted in the typical behavior patterns within each clinic.[1]

The departmentalization of the dental school, and the subsequent autonomy afforded each department, has resulted in each displaying its own unique style of accepted dentist-patient relationship. This is documented in terms of the variable

dimensions for interpersonal relations outlined above. Much like "miniprofessions," each clinical division has gained control over the determination of its own conditions of work. Each functions virtually independently from the others. Each manifests its own procedures, rules, and culture. Even costumes and language vary from clinic to clinic.

Each of the three clinics has its own routine pattern for managing the student-patient interactions related to treatment in that clinic. Some aspects of this pattern are represented in formal and informal rules. Others are the product of typical faculty-student interaction patterns in the clinic. Some rules appear to have a rational basis, related to achieving desired treatment outcomes. Others appear to represent ritualistic practices. Maintaining these practices can serve a variety of functions such as legitimizing the existence of a department as a distinct and autonomous entity.

Some differences are immediately visible upon entering the clinics. The greatest contrast in the physical settings appears between oral surgery and the remaining two clinics. Periodontics and operative dentistry treatments are both performed in the same physical area. Chair assignments are designated on a floor plan posted on the clinic bulletin board each morning and afternoon. Each student scheduled to see a patient during a particular period can be located by consulting the floor plan. Anesthesia carpules and other materials are dispensed from the same centrally located supply counter to students presenting signed authorization slips from

their instructors.

Students with patients scheduled in either the operative or periodontics clinics can be observed at the beginning of any session setting up their handpieces[2] or laying out instruments on the bracket table of their assigned unit and chair. Patients arrive, remove their coats and take their seats, usually without much more conversation than a brief greeting to the student, if even that. An instructor may be called over by the student to authorize anesthesia or approve a treatment plan. In the operative clinic, the student begins by applying a rubber dam clamp and dam over the patient's mouth.

In oral surgery, the women assistants prepare sterile packages of instruments, anesthesia, and linens. The chief assistant, Ms. Tomasso, prepares charts and sets x-rays for viewing on the screens. The group of students assigned to the clinic stand talking with one another, waiting while the faculty for the session are gowned. The patients sit in a separate waiting area in front of the clinic, outside of the rooms where the operatories themselves are located. A student may be sent to the waiting area to obtain a history from a patient. After the brief interview, the student returns to the operatory to rejoin his peers in observing or waiting. Patients are brought into the operatory and seated by the assistants. The patient's x-rays are mounted on a screen beside the chair for viewing. The students would approach a chair prior to beginning a procedure usually only to examine the x-ray

films. The patients usually sit and wait alone until the faculty member(s) present decide to assign a student and supervise the extraction. The assistants then arrange a package of sterile instruments, including syringes, anesthetic carpules (prepackaged dose of anesthetic solution for insertion in a dental syringe), and swabs prepared with topical anesthetic on the bracket table adjacent to the patient's chair.[3] The patient is then draped by an assistant in a green surgical sheet and handed a kidney-shaped pan to hold through the drape during the procedure.[4]

In oral surgery, anesthesia and other necessary instruments and materials need not be authorized by an instructor, but are routinely provided by the assistants. The faculty supervise and assist with every procedure. The assistants direct student activity. Sometimes, students are required to obtain blood pressure readings from all patients seated in the clinic. Procedure calls for the routine distribution of post-surgical instructions to all patients.

The characteristic treatment provided in each of the three clinics differs from that provided in the other clinics. While the oral surgery clinic resembles a hospital treatment room or surgical theater, most of the procedures observed involved only the removal of a tooth using local anesthesia. This procedure usually required less than five or ten minutes of actual treatment, after which, the patient walked out of the clinic to return to work, or school, or home. In the oral surgery clinic, the assistants assumed a great deal of the

responsibility for enforcing norms about proper costume, sterility, and procedure. The four women assistants assigned to this clinic represent one of the only examples of continuity of personnel observed in the school. The faculty members present varied day to day and week to week. Student assignments to the clinic changed each week. The assistants were always present. It was their role to integrate the transients into their clinic. They functioned in indicating to students, faculty members and patients alike what their roles were to be in the clinic. It was their role to present the norms and it was they who imposed sanctions for norm violations.

In the periodontics clinic, in contrast to the oral surgery clinic, longer and seemingly more complex surgical procedures, such as the grafting of tissue from one section of the mouth to another with sutures, were observed. Yet, these procedures were performed in the large general clinic area, where all the other dental procedures are taught, without the costumes, sterility, and personnel maintained in the oral surgery clinic.

In the operative clinic, most patients were having cavities attended to. Some patients in the oral surgery clinic came in complaining of pain. Some complained briefly of pain during or following their extraction. In the operative clinic, patients did not come in complaining of any discomfort initially, but complained about the effects of the rubber dam clamps or drilling. Periodontics patients also reported experiencing pain or discomfort from the scaling of

their teeth.

It should be mentioned with regard to the management of pain during dental treatment that one of the most striking differences in clinic policies involved policies about the routine use of local anesthesia. At Highbridge, students are taught in their lectures on anesthesia and in their behavioral science courses that modern dentistry should be painless for the patient. While local anesthesia is routinely used in the other clinics, in the operative clinic, some instructors discourage its use. The effects of this policy on student-patient and student-instructor relations are discussed in the chapters which follow.

NOTES

[1]In some instances in the text, comparisons are made between the number of times students were observed conforming with or violating a specific norm in a particular clinic. It should be noted that there are problems with quantitative interpretations of observation data such as these. It is likely that, while a student may not have used his patient's name while being observed, for example, he uses the patient's name at other times. The data are limited in that they only include those actions which took place during the time the student was observed. It was hoped that the observation of a large number of students would provide a representative cross-sample of typical behavior in a particular clinic. The quality of the relationships rather than the quantity of specific actions is focused upon.

While not based on a strict statistical scheme, the numbers in the tables in the chapters which follow represent counts made in a content analysis of the complete written record of what occurred in each period of interaction.

[2]A handpiece is the portion of the dental drill assemblage held in the hand. It is attached to the cables of the power unit at each treatment station.

[3]Students bring their own instruments for use in all of the clinics except oral surgery. A student scheduled for periodontics, for example, will select the instruments he expects to use during a treatment session and have them sterilized in the clinic. In oral surgery, the assistants provide trays of sterilized instruments appropriate for the treatments indicated as requested by the instructors present.

[4]Ms. Tomasso keeps a sewing machine in the supply and sterilization room between the oral surgery operatories where she hems and repairs the surgical sheets used in the clinics. She explained that the school budget did not allow for the purchase of new surgical linens needed.

CHAPTER VI

NORMS FOR THE DENTIST'S ROLE IN THE DENTAL SCHOOL CLINIC

The survey to identify norms for student behavior in the student-patient relationship indicates that the faculty do have expectations for student behavior and do agree that the psychological and social aspects of patient care have an important role in clinical teaching. There is consensus among faculty members about norms for student behavior in each of the following areas: providing explanations of treatment procedures to patients; instructing patients in oral hygiene and prevention; providing patients with information regarding after-effects and home care; managing pain and discomfort during treatment; controlling patient anxiety; developing rapport in the dentist-patient relationship; establishing patient trust; using patients' names; and gaining patient cooperation in treatment. All but two related items included on the 21 item survey questionnaire received more than 73 percent agreement by the 174 faculty respondents that the students should do what the item prescribes.[1]

Significant differences were noted in the commitment of members of the clinical divisions when questionnaires were stratified according to department membership of the respondent. These differences are consistent with the hypothesis about

the relationship between a department's emphasis on the technical aspects of dental treatment in clinical teaching and its support for norms for behavior in dentist-patient interaction.

Differences in Commitment to Norms Between the Clinical Divisions

A theoretical assumption underlying the analysis is that norms differ in different situations. In other words, it is not assumed that one set of norms exists for professional behavior regardless of its context. Indeed, it is assumed that, as in all social encounters, various norm systems prevail and, through the actor's definition of the situation, each actor determines which norms take precedence in a given encounter.[2]

A survey of members of the dental school faculty reveals strong support for one set of norms relating to student behavior with patients. While it might be concluded that this represents evidence of the existence of an ethic relating to the importance of humane, psychosocially sensitive care, questions do remain about the role of these norms in the actual clinical training in the dental school. Further examination of the responses supports assumptions about differences in the commitment of members of various departments to these norms. These differences suggest that these norms will receive varying emphasis and support in student-patient interactions in the clinical setting. Actual student behavior with patients in each clinic will depend on the student's

perception of the prevailing norms in that setting. In situations where conflicting norms exist, other variables from the social structure of each clinic will affect the determination of student behavior.

In order to compare responses from members of each of the clinical divisions with those of the other divisions, a score was assigned to each questionnaire based on the responses to each of the individual questionnaire items.[3] The scores for the members of each department were grouped and the mean determined for use in comparing responses between departments.

It was anticipated that differences would be observed in the responses of the different clinical divisions. Those most oriented toward the teaching of techniques were expected to score lowest in their commitment to norms for student performance in the clinic with regard to the interpersonal aspects of care. Those divisions emphasizing an integration of technical, scientific, and procedures directly dependent upon or utilizing interpersonal skills were expected to score highest.

The overall mean scores for the individual departments ranged from 81.8, for endodontics, to 91.2 for Human Behavior.[4] The difference between the mean scores of these two departments is significant, $t=3.1997$, $p<.01$. Those departments whose mean scores were above the overall mean were Human Behavior, pedodontics, preventive dentistry, and orthodontics. (Table 12) These findings support the initial hypothesis about differences in the orientations of faculty members from different

departments. Further, they suggest that it is reasonable to assume that more than one set of norms exist in the school.

TABLE 12

FACULTY QUESTIONNAIRE MEAN SCORES FOR EIGHT CLINICAL DEPARTMENTS AND HUMAN BEHAVIOR

DEPARTMENT*	MEAN SCORE	S.D.
Human Behavior (16)	91.2	8.354
Pedodontics (9)	88.4	9.475
Preventive (13)	87.9	8.391
Orthodontics (14)	86.7	8.792
Oral Surgery (10)	85.5	10.014
Periodontics (23)	85.5	7.692
Prosthetics (16)	84.1	6.981
Operative (14)	82.2	8.021
Endodontics (11)	81.8	5.600

*Number of completed questionnaires returned by each department is given in parentheses.

One reason why the mean questionnaire score for those respondents who are participants in the Human Behavior course is significantly higher than that of the endodontics faculty may be that it reflects the attitudes of those instructors in

the Human Behavior course who are not dentists but behavioral scientists and psychiatrists. That is, the psychiatrists and social scientists, being the most attuned to the philosophies of comprehensive and psychosocially sensitive patient care, may have skewed the scores for this department. However, when respondents were compared on the basis of their participation in the Human Behavior course, controlling for dentist or nondentist status, those dentists who were participants in the Human Behavior course had the highest scores. (Table 13) Thus, the contrast between the mean scores of dentists representing each of the ten departments considered is even more striking, ranging between 95.5 and 81.8.

TABLE 13

MEAN QUESTIONNAIRE SCORES: HUMAN BEHAVIOR FACULTY MEMBERS VS. NONMENBERS

FACULTY STATUS	MEAN SCORE	S.D.
HUMAN BEHAVIOR FACULTY (17)	91.2	8.35
DENTIST (10)	95.5	5.60
NONDENTIST (7)	85.0	7.23
NOT HUMAN BEHAVIOR FACULTY (147)	85.8	8.39

The reason why the scores for those respondents who are not dentists are lower than those respondents who are dentists and participate in the behavioral science course at

Highbridge Dental School is not immediately evident. It is suggested that this may be a consequence of a combination of factors. The only contact the group of social scientists and psychiatrists teaching in the behavioral science course have with the dental school is during the hour and a half each week when they are teaching. They do not have any contact with the clinic itself. Their only experience with dentistry is their own experience as dental patients. Their responses may reflect a common conception of what dentist behavior is like from the perspective of a dental patient. It may also represent a way of assuring the dental school that, despite their behavioral, psychological, or sociological orientations, they respect the importance of having students learn dental technique as well. Their responses may be saying, in effect, "Yes, we think the interpersonal aspects of dental treatment are important; but, we can understand that, in the school clinic, the student cannot be expected to display these norms." The reason why the scores of the dentists participating in the course are significantly higher than those of the remainder of the dental school faculty is that those dentists volunteering to teach in the course do so because of their commitment to such norms.

Departments Oriented To Teaching the Interpersonal Aspects of Treatment

As predicted, respondents from those clinical departments most oriented to teaching the delivery of care, requiring an integration of clinical techniques and interpersonal skills, scored closest to the Human Behvaior faculty. While

training in clinical prevention, pedodontics, and orthodontics does include technical clinical procedures, other aspects of care are relevant to treatment and emphasized in these departments.

Preventive dentistry involves patient instruction in various home care and hygiene skills. To effectively provide this instruction, students must not only have an understanding of the technical skills and disease processes necessary to prevent dental disease, but must be able to effectively communicate and demonstrate these to patients. Students must attempt to motivate patients to comply with their instructions while no longer under their direct supervision. For this, expertise in interpersonal skills is clearly required. The relationship between the dentist and patient in preventive dentistry even more than in other specialties of dentistry is an example of the "mutual participation" model described by Szasz and Hollender.[5]

Pedodontics is probably the only major department where all of the clinical specialties (which are isolated in the other clinics) are expressly brought together in a routine way to treat a special patient population, children. Given its emphasis on skills related to the treatment of a patient population rather than the treatment of a particular disorder, incorporating the techniques emphasized in the remaining specialty divisions, interpersonal relations should play an important role in training in this setting.

In addition to the factor of clinical integration,

pedodontics differs from the other specialties in that it specializes in dental care for children. Here, and in orthodontics as well, norms about care for children would be expected to take precedence. An assumption in the creation of a department for children's dentistry is that dentistry for children is different from dentistry for adults. One obvious way in which it is different is that the juvenile patient does not characteristically come to the clinic for treatment voluntarily but is brought by parents or guardians. Since the child does not voluntarily choose to become a patient, the extent to which he may be willing to cooperate with the dentist is problematic. The contractual elements of the relationship between dentist and patient exist between the dentist and the patient's parent, instead of between the dentist and the patient. It is the parent that takes the responsibility for making or breaking appointments, accepting the treatment plan, and paying for care. It is assumed that children do not behave in the same ways as adults and, therefore, require special treatment. In these clinics, aspects of behavior peculiar to younger patients become an integral part of the knowledge students are expected to acquire.

As observed above, while strong commitment to an ethic supporting norms about the dentist-patient relationship was indicated, differences exist between clinical divisions in the dental school. Strongest support was demonstrated by a group of departments which, for various reasons, would be

expected to be oriented to such norms. Determining the influence of faculty support on the likelihood and character of student compliance with these same norms requires further exploration of the nature of the clinic environments.

Teaching Dental Procedures: The Departments of Surgical and Restorative Dentistry

The remaining major clinical divisions, oral surgery, periodontics, prosthetics, operative and endodontics, had mean scores at or below the median when the scores for the major departments are compared. (Table 12) The oral surgery and periodontics divisions, which had similar mean scores, are responsible for teaching surgical procedures. Oral surgery teaches procedures for removing teeth, while periodontics teaches surgical procedures designed to save teeth from being lost.

The remaining three divisions, operative, prosthetic, and endodontic dentistry, scored lowest as departments. These departments teach distinct skills to students in an environment which isolates the procedures being acquired from the diagnostic procedures preceding treatment and a perspective on the treatment in the context of the patient's entire case and subsequent events. In operative, students learn to prepare cavities and place restorations such as silver and mercury amalgam fillings, cast gold crowns, and cast gold inlays and onlays. In the practice of dentistry, these procedures are not considered true "specialty" procedures but are part of the routine practice of dentistry.

In prosthetics, students learn to make removable and fixed appliances to replace lost or missing teeth. The student is responsible for producing a finished product rather than planning and implementing treatment to the satisfaction of a patient.

In endodontics, students acquire experience in root therapy or root canal treatments for patients referred from the other clinics.

Students are not assigned patients to treat--they are given patients who require specific treatments to use to fulfill their requirements in a particular division. Thus, for example, a student could conceivably complete a root canal for a patient and never see that patient again. If the patient requires operative treatment to restore the tooth following the endodontic procedure, he must hope to be assigned to a student for this treatment.

While it should be noted that faculty consensus about expectations for student behavior is great, differences in support for particular norms are more pronounced when responses from members of the individual departments are compared.

Comparison of Norms in Operative Dentistry, Oral Surgery, and Periodontics

The attitudes of faculty members of the operative dentistry, oral surgery, and periodontics division are similar regarding norms for student behavior when the mean questionnaire scores for respondents from these departments are compared. (Table 12)

The mean questionnaire scores for respondents from the oral surgery and periodontics divisions fell at the median of the departments compared. Operative dentistry had one of the lowest scores of any clinical department. (Table 12)

On the individual questionnaire items, there is strong agreement among all respondents with each item with the exception of one pair of items.[6] Faculty attitudes appear most disparate when responses to the following two statements are examined:

> It is the student's responsibility to work with even very uncooperative patients in order to develop interpersonal skills. (Table 14)
>
> A student is right to refuse to work with a patient he finds uncooperative. (Table 15)

TABLE 14

FACULTY RESPONSES TO: "IT IS THE STUDENT'S RESPONSIBILITY TO WORK WITH EVEN VERY UNCOOPERATIVE PATIENTS IN ORDER TO DEVELOP INTERPERSONAL SKILLS"

RESPONSE	PERCENT (N=174)
AGREE	58
NEUTRAL	11
DISAGREE	32

It is these items which appear most closely to measure commitment to teaching patient management skills as part of clinical training. Responses to the first item, in particular, can be considered to characterize the faculty's views of the

TABLE 15

FACULTY RESPONSES TO: "A STUDENT IS RIGHT TO REFUSE TO WORK WITH A PATIENT HE FINDS UNCOOPERATIVE"

RESPONSE	PERCENT (N=173)
AGREE	24
NEUTRAL	32
DISAGREE	45

patient's role in the school dental clinic. Two opposing conceptualizations of this role can be envisioned. In the first, the patient is at the school to receive the care he requires, thereby providing training for the student in the art and science of clinical practice. In the second, the patient is present as an example of a clinical pathology which the faculty can have the student utilize to practice clinical techniques. At either extreme, the patient can be regarded as either the goal, or the means to attaining the goal, of the student's education. The faculty appear divided about whether the patient in the clinic should represent only an example of oral pathology for the student to practice mechanical treatment techniques upon, just like the student's cadaver and extracted teeth,[7] or whether the patient should be an example of the average dental patient, capable of interacting with the student-dentist and thereby providing an opportunity for the student to practice the interpersonal skills necessary for effective clinical practice as well. This division is

evident in comments made to the students, the observer, and patients themselves.

Significant differences were observed between the responses of members of the operative, oral surgery, and periodontics departments to the statement, "It is the student's responsibility to work with even very uncooperative patients in order to develop interpersonal skills." (Table 16) (X^2=12.957, $p<.02$.) While none of those responding from the oral surgery division disagreed with this statement, over a quarter of those responding from the periodontics division, and half of those from operative dentistry, did disagree with it. This suggests that the oral surgery and periodontics instructors are more committed to having students learn to treat uncooperative patients in dental school than members of the operative faculty. This supports the descriptions of the orientations of each of these departments throughout this discussion. The operative faculty is depicted as most oriented toward the teaching of dental technique alone as if it were distinct from the total process of providing treatment for a dental patient.[8] On this questionnaire item, the three departments focused on in this study are most clearly divided on what they see the dental student's role to be.

The consistent support expressed by the faculty for norms related to students' responsibilities for demonstrating interpersonal skills with clinic patients, with the exception of the student's having a responsibility to learn to treat the "uncooperative patient," suggests that consistent support

TABLE 16

FACULTY RESPONSE TO: "IT IS THE STUDENT'S RESPONSIBILITY TO WORK WITH EVEN VERY UNCOOPERATIVE PATIENTS IN ORDER TO DEVELOP INTERPERSONAL SKILLS" FOR RESPONDENTS FROM ORAL SURGERY, PERIODONTICS, AND OPERATIVE DENTISTRY.
(IN PERCENTAGE)

RESPONSE	OPERATIVE (N=14)	PERIODONTICS (N=23)	ORAL SURGERY (N=10)	TOTAL (N=47)
AGREE	50	61	100	66
NEUTRAL	0	13	0	6
DISAGREE	50	26	0	28

$X^2=12.957$, $p<.02$

would be demonstrated in actual clinical teaching for these norms. This support should appear in the form of direct instruction, the faculty's own behavior with clinic patients as role models, and as sanctions for student's violating clinic norms. It is likely then that students should be aware of the faculty attitudes about their behavior with patients in the school clinic. It has been hypothesized, however, that despite the similarities in the attitudes expressed by the faculty, student behavior will vary in the individual clinics. It is also hypothesized that, due to the existence of counter norms in the individual clinics, student-patient relationships will not reflect this strong consensus. To test these hypotheses, first the attitudes of the students were measured and compared to those of the faculty. Then, the actual applied

clinical training of individual students, with their patients and instructors, was observed in the operative, periodontics, and oral surgery clinics.

A Comparison of Student and Faculty Attitudes

The attitudes of students during the last two years of dental school were measured using a two-part survey instrument similar to that used to measure faculty attitudes. Students were given questionnaires during the 1973-74 and 1974-75 school years, thus providing data for one cohort of students over a two-year period. The first part of the questionnaire, referred to as the "student" questionnaire, was identical to that given the faculty. The second part, referred to as the "student-faculty" (or "stu-fac") questionnaire, asked students to respond to the same items as they believed most of the faculty of the dental school would.[9]

The mean questionnaire scores of the student surveys were significantly lower than those of the faculty survey. (Table 17) This difference in mean scores remains when class is controlled for as well.[10] This suggests that students, during the clinical portion of their dental education, express less commitment to the norms of the faculty for behavior in the dentist-patient relationship.

However, when the mean scores for the student surveys are compared with the mean scores of the individual faculty departments, the student mean scores are quite similar to those of the faculty representing those clinical departments with the lowest mean questionnaire scores. (Table 18) It is

TABLE 17

COMPARISON OF MEAN QUESTIONNAIRE SCORES: STUDENT AND FACULTY SURVEYS

	STUDENT MEAN SCORES	FACULTY* MEAN SCORES	t	2-tail p
STUDENTS 1973-74 (N=38)	81.7	86.3	3.12	<.01
STUDENTS 1974-75 (N=56)	81.3	86.3	3.8	<.001

*Faculty N=174

TABLE 18

MEAN QUESTIONNAIRE SCORES FOR STUDENTS AND FACULTY OF MAJOR CLINICAL TEACHING DEPARTMENTS

DEPARTMENT MEMBERSHIP	MEAN SCORE
Pedontics	88.4
Oral Surgery	85.5
Periodontics	85.5
Prosthetics	84.1
Operative Dentistry	82.2
Endodontics	81.8
Students 1973-74	81.7
Students 1974-75	81.4

interesting to note that junior and senior students spend much of their time in the operative and prosthetics clinics and, therefore, are exposed to the faculty of these departments most during the period of clinical training.

On the student-faculty portion of the student survey, students were asked to respond as they believed most of the

dental faculty would to the same questionnaire. The student response was consistently significantly lower than the actual faculty mean questionnaire score, 1973-74, $t=10.02$, $p<.001$; 1974-75, $t=11.16$, $p<.001$. (Table 19) Again, these differences remain regardless of the student's class status. Student responses indicate their expectation that the faculty would respond in a less psychosocially sensitive way than they actually did. This response to the "stu-fac" questionnaire suggests that students perceive faculty to be significantly less committed to these norms than they reported themselves to be. This raises questions about how effectively faculty have communicated their alleged commitment to these norms to their students.

TABLE 19

COMPARISON OF MEAN QUESTIONNAIRE SCORES:
FACULTY AND STUDENT-FACULTY SURVEYS

	STU-FAC MEAN SCORES	FACULTY* MEAN SCORES	t	2-tail p
STUDENTS 1973-74 (N=38)	71.3	86.3	10.02	<.001
STUDENTS 1974-75 (N=56)	71.0	86.3	11.16	<.001

*Faculty N=174

While student scores were lower on the student questionnaire than the actual faculty scores, they are significantly higher than those on the stu-fac questionnaire. (Table 20) Thus, students express greater commitment for themselves to these norms for interpersonal relations in the dental school clinic than they attribute to the faculty.

TABLE 20

COMPARISON OF MEAN QUESTIONNAIRE SCORES FOR STUDENTS: STUDENT AND STUDENT-FACULTY SURVEYS

RESPONDENTS	QUESTIONNAIRES		t	2-tail p
	STUDENT MEAN SCORE	STU-FAC MEAN SCORE		
STUDENTS 1973-74 (N=38) SURVEY	81.7	71.3	7.01	.001
STUDENTS 1974-75 (N=56)	81.4	71.0	7.36	.001

Student responses to individual items on the "student" and "student-faculty" questionnaires were compared to determine in which areas students perceived their expectations to correspond or conflict with those they ascribe to the faculty. On the 1973-74 and 1974-75 questionnaires, student responses were more "humanely oriented" for themselves than for the response attributed by the respondent to the faculty for 43% and 45% of the total responses given respectively.[11] Almost half the responses to corresponding items on the "student" and "stu-fac" questionnaires, 49% and 45% respectively, are identical. Students responded less "humanely" for themselves in only 10% of their responses on both waves of the survey.

On both panels of the questionnaire, students give a less humanistic, or psychosocially sensitive response for themselves than for the faculty in over 20% of their responses to the following items:

> It is the student's responsibility to work with even very uncooperative patients in order to develop interpersonal skills.
>
> A student is right to refuse to work with a patient he finds uncooperative.

These items represent a norm about learning to treat difficult patients. This was the only pair where a large number of student responses were not more supportive of the norms than their responses for the faculty.

It appears that, as expected, students believe the faculty expects them to learn to treat patients who are difficult to manage. However, the students themselves do not agree that this is expected of them. Their responses illustrate that they beleive it more important in the eyes of the faculty that they treat such patients then in their own.

On the 1973-74 survey, a disproportionately high 22% of the student responses indicated support for themselves but more support for the faculty on another item. However, it had one of the highest percentages of students responding more humanely for themselves than for the faculty as well. It states:

> It is better for a student to finish his work than spend time attending to indications of patient anxiety.

Sixty-eight percent of the thirty-eight respondents disagreed with this statement on the student questionnaire. On the "stu-fac" questionnaire, only twenty-six percent of the students expected the faculty to disagree.

On the 1974-75 student survey, 20% of the students responded with less support for themselves than for the faculty to the following:

> The dental student should deal with patient feelings at the outset of their relationship by beginning to work promptly and efficiently, thereby establishing patient trust.

Here, one of the smallest percentages of students responded more humanistically for themselves than for the faculty, 23%.

These four items, for which student responses were less humanistic in orientation for themselves than for the faculty, relate to norms about how a student should spend, or is expected to spend, his time in the clinic. The responses suggest that students are more committed to a norm about "getting their work done" and not wasting time with difficult or anxious patients than they believe the faculty is. Whether this perception arises from the students' own personalities and prior definitions of the dentist's role or from experiences in the dental school is not known. What the actual relationship between these attitudes and attendant behavior in the school clinics is will be explored next.

NOTES

[1] See pp. 132-134.

[2] See Joseph Fletcher, Situation Ethics: The New Morality (Philadelphia: The Westminster Press, 1974); and Peter Berger and Thomas Luckmann, The Social Construction of Reality (Garden City, New York: Doubleday and Company, Inc., 1966).

[3] There were five possible responses to each of the twenty-one items on the questionnaire, ranging from the "most humanely oriented" to the least, with a neutral response in the middle, as in a Likert-type scale. See Appendix II. To compute a score for each questionnaire, each possible response was assigned a value from one to five--five being the most humane response; three, the neutral response; one, the least humane; etc. to form a Likert-type scale for each item. The highest possible score on the entire questionnaire, then, is 105, the lowest, 21. The actual scores ranged from 70-102. The mean score for the nine major departments was 85.2. These include Human Behavior, endodontics, operative, oral surgery, orthodontics, pedodontics, periodontics, preventive, and prosthetics. See Appendix I.

[4] Only the scores of the principal clinical teaching departments and members of the Human Behavior faculty, who are not really representative of an actual discrete "department" within the dental school.

[5] See T. S. Szasz and M. H. Hollender, "A Contribution to the Philosophy of Medicine: The Basic Models of the Doctor-Patient Relationship," A.M.A. Archives of Internal Medicine, 97 (May, 1956), 585.

[6] Consensus among faculty members for each of the nineteen remaining items ranged between 73 and 100%.

[7] In the preclinical technique courses, students practice dental treatment techniques first on pathology-free, extracted teeth.

[8] See Conclusions, Chapter X.

[9] See Chapter IV, Methods.

[10] Differences between scores for junior and senior students and the faculty were significant for both surveys, with the exception of 1973-74 senior respondents. No explanation can be made for this other than to attribute it to the small number of senior students responding to the first student

survey, eleven of the 42 seniors, 26%. Senior questionnaire scores on the 1974-75 survey were significantly lower than those of the faculty, $t=3.5$, $p<.001$. In this survey, thirty-five of the 44 students returned fully completed questionnaires.

[11]This was determined by comparing the response, of the five possible responses for any one item, given by a student on the "student" portion of the questionnaire to his response to the same item on the "student-faculty" portion.

CHAPTER VII

COMPLIANCE WITH NORMS FOR HUMANE CARE IN THE ORAL SURGERY CLINIC

Routine Treatment Procedures

The organization and setting of the oral surgery clinic are described briefly in the introduction above. It is different from the other two clinics considered in a variety of ways. The most notable difference is the presence and involvement of the dental assistants. In this clinic, in contrast to the other two, patients are treated by a team of people including instructors, assistants, and at least one student. The assistants take over the function of preparing and providing students with instruments and anesthesia. The student is less responsible for making decisions, not working on his own. Unlike the other clinics, here more than one student may be directly involved in the treatment of an individual patient. The dental assistants enforce requirements such as the taking of a medical history and the distribution of post-surgical instructions.

In addition, this is the only one of the major clinical departments where care is provided for both children and adults in the same setting, as it is for disabled and "normal" patients as well.

The group of approximately four students assigned for

a clinic session have nothing to do unless patients come to the clinic for treatment. Some appointments are made in advance by the dental assistants. Each student is expected to have at least one opportunity to perform an extraction during his rotation in the clinic. Sometimes, there were not a sufficient number of patients to allow each student such an opportunity. At other times, patients were crowded on the benches of the waiting area and, as fast as one extraction was completed,an assistant would be seating a new patient in the operatory chair. No procedures were performed unless an instructor was present. Usually, only one instructor or dental resident was in attendance. If he were late or absent, the students and patients were forced to wait and no patients could be seen.[1]

While there was more conversation to be heard in the oral surgery clinic than in the other clinic settings, this appeared to be a function of the number of people confined to the small space. Most occurred between members of the same peer group. That is, students were unlikely to talk with patients. The assistants might speak with an overtly anxious or inquisitive patient, give a student an instruction, or speak with one another or the observer.[2] The students were likely to talk most with one another. Instructors addressed comments to students and assistants sporadically. Some were likely to speak to the patient, others did not, addressing all their comments to students or the assistants. Much of the talking concerned treatment. Students in the oral surgery

clinic have the greatest opportunity to work together in groups with an instructor on an individual case, or to observe other students and instructors providing treatment. Questions were posed by students or instructors about procedures. Since students spend very little of their clinic time in the oral surgery clinic, and since the rules and routines are different than those on the eighth floor, the assistants were often busy reminding students and instructors of their responsibilities in the clinic regarding, for example, sterility measures, taking blood pressure readings, completing charts, or providing post-operative instructions.

Prior to starting an extraction, very little was said to a patient. The assistant seating the patient might ask questions directly related to the case, as might a student or instructor. There was a delay in the start of a procedure when a patient had to wait for an available student or instructor before the extraction could commence. Then the patient would most often be observed sitting alone and unattended in the operatory. Students not performing any treatment would be seen looking out a window, completing charts, talking with one another, or observing someone else's technique.

Treatment procedures appeared to be the most routinized in the oral surgery clinic. Roles were clearly delineated and enacted by the personnel present. The procedures of the clinic were directed and enforced by the dental assistants. The procedures for the typical extraction rarely varied in any respect. First, the patient's medical history was obtained by a student.

When a vacant chair became available, the patient was seated in the operatory. Sometimes a student would then take a blood pressure reading. When students and an instructor were ready to begin, an assistant would drape the patient with a green sheet. A package of sterile instruments would be arranged on a table by the assistants. Handles to adjust the overhead lighting above each chair were covered with paper bags.[3] Carpules of anesthetic solution were inserted in the sterile syringes. Students and instructors scrubbed their hands.[4] The students and instructor would examine the patient's radiographs. A student would apply a swab of topical anesthesia to the patient's gum and then give the appropriate injections of anesthesia. The student would then check for indications that the patient had the characteristics of anesthesia, usually inquiring whether the patient's face or lips "felt funny." Then, an instrument used to separate the tooth from its tissue attachments would be inserted. The student would explain that he was "testing for anesthesia," and would ask the patient whether he felt "pressure" or "pain"--sometimes explaining that the patient should be able to feel the "pushing" but not feel "pain." Then, using a forceps, the tooth would be removed. During the procedure, the assistants stand nearby to supply necessary instruments as required.

After the extraction, gauze is inserted to control bleeding. The patient is instructed to bite down on the gauze and then given a sheet of printed instructions for

home care. These are intended to prevent the onset of excessive bleeding or discomfort and thus promote effective healing. If a student neglected to provide one, he was reminded to do so by an assistant. The patient was then left to leave the clinic while the student responsible for the extraction finished filling in the patient's chart.

It seems apparent, given the urgencies of a surgical procedure, that some rational organization is necessary to insure the patient's safety. Excessive bleeding may have to be controlled or other emergency situations could occur which the personnel must be prepared to handle quickly, efficiently and effectively. Thus, any instrument or implement, including additional anesthesia, which might be urgently needed is readily at hand.

Therefore, the work situation in the oral surgery clinic seems to dictate that the patient routinely receive certain types of attention from those attending to him. Choices appear to be limited by the nature of the work and the urgency that it be performed rapidly and accurately. Here, for example, anesthesia is routinely provided to all patients before treatment is begun. Only subsequent anesthesia is provided at the instructor's discretion when a patient appears uncomfortable after a procedure has commenced and cannot be interrupted.[5] Frequently, it was the instructor who suggested to the student, either verbally or by handing him a prepared syringe, that additional anesthesia was indicated. In the other clinics, the decision to use

anesthesia at all is left to the instructor in charge of the case.

Working in this setting, which at first displays features which could inhibit aspects of the patient-practitioner relationship deemed desirable by faculty, the student is encouraged to conform with some of the dental clinic norms and discouraged from conforming with others. For example, unlike operative treatment,[6] pain and nonverbal communications are responded to by and large routinely, but not always in a way that shows recognition of the psychological aspects of the complaint, or sensitivity to its origin. It may be assumed that complaints or patient discomfort during an extraction are regarded as legitimate complaints worthy of attention.

Humane Care for Children

The major clinical departments in the dental school which exhibited the highest mean scores for their faculty on the questionnaire were pedodontics, preventive dentistry, and orthodontics.[7] Pedodontics and orthodontics both involve care for juvenile patients, suggesting that a belief that children are different from adults and require special treatment. In fact, the clinical sciences of orthodontics and pedodontics include procedures which are different from those used in the remaining clinical specialties. Pedodontic and orthodontic techniques include skills involving both technical and patient management procedures. The results of the survey support the assumption that differences may exist in the norms for the dentist-patient relationship in these

clinics as well. No attempt has been made to determine through observation whether differences exist in the actual teaching of interpersonal skills and norms for interpersonal relations in these two departments.

A general inferred norm, that humane dental care should be provided for children, may be one representation of a culturally prescribed norm about how children are regarded and should be treated. This is supported by the implication that an adult patient who displays fear, or otherwise "makes a fuss" about accepting dental treatment, is "acting like a child."

The oral surgery clinic is the only department where both children and adults are treated. It therefore provided a setting in which one could observe whether any differences occurred in the way students were taught to provide treatment for patients based on the age of the patient involved. Students were responsible for thirty-three treatments of an individual patient observed in the oral surgery clinic: twelve of these patients were children or teenagers.[8]

One of the functions taken over by the dental assistants present in the oral surgery clinic, as a rule, was the comforting of anxious patients and children. Before a young child was seen by a student or instructor, Ms. Tomasso would phone one of the assistants on the eighth floor, telling the patient she was phoning the "tooth fairy" for the child. The child was then permitted to talk with the "tooth fairy" to remind her that the child should receive a visit that evening. Students attempting to talk with their patients, particularly

with children, were interrupted by Ms. Tomasso, or one of the other assistants, who would attempt to take over the function of relaxing the patient from the student.

Rapport With Young Patients

In ten of the twelve observations of students treating children, apparent rapport was observed in the interaction between the student and the child. Students were apparently more likely to spend time talking to their young patients. Five students were overheard explaining to the child what was being done. Two allowed children requiring multiple extractions to decide how many teeth they preferred to have extracted at that visit. Four of the students used their patient's name and, on two occasions, the instructor used the child's name while treating him. In two of the three incidents where there were nonverbal signals from the patient, the students responded to the patient in a sensitive way. The student would interrupt what he was doing to ask the patient if something were bothering him and, then, indicate to the patient that something would be done--more anesthesia or allowing the patient to move to a more comfortable position, for example, --to make the patient more comfortable.

With the adult patients, on the other hand, rapport was observed in only six of the twenty-one remaining observations. In eight instances, a distinct lack of rapport between the student and the patient was noted. On only one occasion was a student observed providing an explanation of the procedure to an adult patient. Only two students were heard using

the patient's name while talking to them. In five of the observations, nonverbal communications of discomfort were recorded. None were responded to by the student. In one, the instructor suggested to the student that the patient might require additional anesthesia as he appeared to be uncomfortable.

Use of Human Relations Skills to Allay Anxiety or Pain

The norms about using human relations skills to relieve anxiety and pain received support in the oral surgery clinic through the example provided by some of the faculty and the assistants. Several faculty members here were observed spending time talking with nervous patients, joking with them or, simply, reassuring them prior to and during procedures. In oral surgery, unlike in the other departments where the instructor is only, theoretically, present during the administration of anesthesia, and to assist or check on a student's progress, the instructor is present during the entire surgical procedure. Often, the student ends up observing the instructor performing the procedure himself. Assistants and other students are also present so that there are a number of people around the patient who can respond to his various needs.

Especially with children, the dental assistants made an effort to spend time talking with patients who appeared nervous while awaiting attention in the clinic. Occasionally, a student was noticed talking to a patient waiting in a dental chair, attempting to deal with his nervousness. Sometimes,

when this occurred, an assistant would interrupt the student and interject her own method of making the patient tranquil. If she felt unsuccessful, she would suggest using general anesthesia to the patient and proceed to schedule a new appointment for him.

During one observation, Ms. Grimes, an assistant intervened in the student's attempt to explain the anesthesia to a young patient:

Student: "This is just . . ."

Ms. Grimes: "He's painting something on your gums."

Student: "Now I'm gonna give you a little novacaine to put your tooth to sleep."

Ms. Grimes: "Now it's gonna feel funny. You're gonna have a 'fat lip!' Give you a Hawaiian punch--feel fat--a fat lip!"

Ms. Grimes pointed out that one of the instructors always jokes with the patients, particularly the women, to cheer them up. "You should have been here on Thursday. In the middle of a procedure he stops and says, 'Aren't I gorgeous?' The patient has to relax!" She said that the patients seem to love it when the instructors do that. "Did you see that widow yesterday? She was very nervous and he really calmed her down."

Occasionally, students were observed joking with patients as well. Ms. Grimes commented that "some of these students don't say anything! The other doctor threatens to flunk 'em for not engaging patients in dialogue and explaining

what they're doing the whole time to the patient." One of the instructors with this philosophy joked with an elderly woman patient who appeared apprehensive. He kept asking her when they would be going out together "on a date." Then he said, "That's the secret. Have to talk to them. Tell them all sorts of bull shit when they're sick. Take their mind off it."

A very different point of view was expressed by another oral surgery instructor. He described a lecture he had recently heard on malpractice which contended that it was "absurd" to tell patients about all the possible complications which could conceivably arise. "What do you tell them? What don't you tell them? When do you tell them? Patient just wants to know they'll be well. They don't want to know anything [i.e. about what you are doing]."

Learning to Treat Uncooperative Patients

Support for the norm about learning to treat uncooperative patients was varied among the faculty in the school.[9] What distinguished the "uncooperative" or "problem" patient however was not clear. How such a patient is defined would depend on what type of cooperation was necessary in any particular clinic. It is likely, therefore, that the uncooperative clinic patient might not be a problem patient in a different setting such as a private office, where the interaction between the dentist and the patient might be very different than that in the school clinic.

When asked what sort of patients were a problem, two

students stated that pedodontic patients were a problem. This appeared to be an expectation in the oral surgery clinic in particular. There, the usual means for managing the frightened child was described as pharmacological.

One student seated a crying child in the oral surgery clinic operatory. The observer asked him if he could perform the child's extraction using local anesthesia. He replied, "Are you kidding? The problem is giving them the needle. Even sometimes when a kid is quiet like this [pointing to another child sitting in an adjacent dental chair] you have trouble. When they're screaming like that--forget it! You could hurt them with the needle."

When asked about the experiences of students treating patients in the pedodontics clinic, another student said, "Those kids hate it. They don't see it's good for them. They just see us as the enemy."

When the observer commented that she had heard that the children were well behaved in the pedodontics clinic, he said, "Well, my kid [patient] is, but, on the average, I'd say they're not. Adults might not like it, but they realize it's good for them." The observer asked how the children in oral surgery behave. He continued, "They premedicated. Demerol. Valium. It's hard enough being a dentist at this stage, let alone a psychologist--sociologist!"

It is interesting how, with regard to the behavior of young patients, students report their expectations rather than their actual experience since this experience contradicts

their beliefs. The students interviewed implied that, despite their own positive experiences, for the most part, young patients were expected to be a problem. Further, this problem is and should be handled with medications, e.g. valium, rather than through any effort to win the patient's trust and confidence. It is similar to the situation observed by Glaser and Strauss who found that hospital personnel believed patients did not want to know about their impending death and so did not tell them.[10] This belief was based, however, on rumor and supposition, rather than on experience or valid data. In fact, most of those children observed as patients in oral surgery were very quiet and well-behaved, some moreso than the adults. None were given premedication with the exception of several brought in for procedures under general anesthesia. These were predominantly patients with either cerebral palsy or some form of brain damage.

Information and Post-Surgical Instructions

A special situation exists with regard to the validity of the information given a patient about what is being done in the oral surgery clinic. Sometimes misinformation is used to allay patient concern. Students routinely "test" for anesthesia, following the anesthetic injections, by observing the patient and asking for reports about how his mouth feels. Students press the gums around the anesthetized tooth, asking if the patient can feel "pressure" or "pain." The patient with anesthesia retains sensitivity to pressure--he should be able to feel the procedure but should not experience pain.

Sometimes the student, using the elevator to begin separating the tissue around the tooth, the first stage of the extraction, tells the patient he is "testing" for anesthesia, as he has observed his instructors doing. The student "tests" while asking the patient what he is feeling. The patient is unaware that the extraction has actually begun and, unless he appears extremely sensitive or uncomfortable, the student proceeds.

One of the norms studied in the present research is that a student should provide the patient with instructions for care after leaving the clinic. This norm seemed to have the most formal support in the oral surgery clinic where printed sheets of instructions are available and the dental assistants are present to enforce their distribution.

One morning, during an orientation to their rotation through the oral surgery clinic, Ms. Tomasso, the chief dental assistant, addressed the student dental assistants on the procedures followed in the clinic. She emphasized that a prescribed sequence of procedures was posted in the clinic operatory. This includes the distribution of "post-op" instructions which, she stressed, should be given to the parents of any juvenile patients.

While, in fact, rarely any discussion of possible after-effects of home care instructions was heard in any clinic, patients were given home care instruction more often in the oral surgery clinic, $X^2=6.675$, $p<.05$. (Table 21)

Of the six junior students observed providing patients with the written home care instruction sheet, two gave

additional instructions verbally to the patient. In one instance, an instructor was observed giving a patient the printed instructions for the student.

TABLE 21

OBSERVATIONS IN WHICH STUDENTS PROVIDED HOME CARE INSTRUCTIONS BY CLINIC (IN PERCENTAGE)

HOME CARE INSTRUCTION	OPERATIVE (N=50)	PERIODONTICS (N=34)	ORAL SURGERY (N=41)	TOTAL (N=125)
PROVIDED	4	12	22	12
NOT PROVIDED	96	88	78	88

One student was heard asking his patient if she would prefer instructions in English or in Spanish. This was the only time a student was heard considering any language problems as they related to the provision of care.

Another student was observed sitting beside a child whose extraction he had just completed. As this was an unusual sight in the clinic, an assistant asked the student, who was completing the child's chart, what he was waiting for. He responded that he was waiting for the post-op instructions, and he then asked the assistant if the patient's father was present.

Another student explained to his patient while placing the surgical packing, "I want you to stay this way about a half hour. Don't rinse your mouth. No swishing your mouth

until tomorrow. You can eat--drink milk and you can eat in about an hour. I'll give you a sheet [home care instructions]." A fourth student was overheard telling his patient that, "The nurse will give you instructions."

In another instance, one student asked another to go and get an instruction sheet for him. He told his patient, a child, that he was going to give her instructions about what to do. When the other student returned with the instructions, they handed them to the young girl and dismissed her from the clinic. Several patients returned after having left the clinic either to request post-surgical instructions, which they had neglected to be given, or to ask a question about the instructions they had received.

At no time was any instruction in procedures for preventive dentistry heard in the oral surgery clinic. The patient's immediate complaint was the major concern attended to. Patients leaving with stitches or who had to return to the clinic for a second appointment for whatever reason were given their appointments by the assistants. On their return, they would see whichever student or instructor was assigned to the clinic for that day. There was no responsibility placed on the student or the instructor to follow-up on an uncompleted case after their assignment to the clinic.

Latent Functions of Procedures And the Teaching of Norms

Ritualism in the Oral Surgery Clinic

The prescribed clinical procedures and the actual conformity with those prescriptions in the oral surgery clinic has been described above. Objectively, it seems reasonable to expect that certain rational practices will exist in a surgical setting which will have an effect on the structure of the interpersonal relations in that setting. These practices are established ostensibly for the protection of the patient. Ultimately, the objective of such procedures should be the delivery of effective and humane treatment to patients. However, the original function of a procedure or practice can become obscured over time. A practice can continue simply because it has always been, as a ritual, coming to serve other functions distinct from its original intent.[11] An analysis of the practices in the oral surgery clinic as they actually operate elucidates several latent functions which they serve. Some, which at first appear to be rational procedures, on closer examination, seem to have taken on a new function particular to this setting. This raises questions about how necessary such practices are for the delivery of effective care and how they contribute to the teaching of norms for humane interpersonal relations.

It has been suggested that the organization of the oral surgery clinic with its efficient schedule of routine procedures, personnel, and aseptic precautions is necessary to insure the safety of its patients. There are, however,

other rationales which can be offered to account for the practices employed, raising some questions about the necessity for them. Some can be described as rituals, implying, according to Weber, a traditionalism and conservatism in which the rational meaning of the action has been forgotten. A similar conceptualization is provided by Pareto in his description of "residues."[12] The new function of these practices, it is suggested, is to maintain a mystique which legitimates the existence of the clinic in its present form as a distinct physical entity and, further, to maintain the status and power of the role of the dental assistant. This new function has had consequences for the support given norms for interpersonal relations.

Many extractions can be and are performed routinely in the practice of general dentistry. Specialists, called oral surgeons, do exist and do receive referrals from general practitioners. It is inferred from the growth of specialties like periodontics and endodontics that there is less of a role for exodontia in dentistry than was the case a century ago. As knowledge about how to prevent and arrest decay increases along with skills in "saving" once hopelessly damaged teeth, it begins to appear as though almost no teeth will have to be extracted in the future. If public awareness and motivation continue to increase as well, this seems to be more and more assured. Students spend a much smaller percentage of their clinical training in this department than in other departments. While they will be licensed to perform

extractions, they were observed to have little training or practice in this procedure. Oral surgery, or exodontia which is emphasized in the student's training in this field, appears to be fading from prominence both in the practice of and training for dentistry. It is suggested that the ritual practices, especially those involving asepsis, are used to provide a validation or raison d'etre for the clinic's continued existence. Many of the procedures were obviously performed "for show," with students, dental assistants, and faculty from other departments describing them as "silly." One role of the chief dental assistant, Ms. Tomasso, is to chase after students, assistants, and instructors to remind them to observe some clinic rule. The existence of some procedures which are regarded as irrational and "silly," makes the rationality and validity of other procedures equally questionable.

When it has been suggested that extractions could be performed in the eighth floor clinic, members of the oral surgery faculty offer various rationales to deny the efficacy of doing so. They maintain that the performance of extractions would be too upsetting for the other patients present. Also, sterility could not be adequately maintained in the larger clinic environment.

In the other clinics observed, little overt attention was given to the preservation of aseptic conditions. Students used sinks with hand operated faucets to wash their hands. No particular pattern of hand washing was noted although students generally washed their hands before beginning to treat

a patient. Students' hands came in contact with many nonsterile materials while treating patients. Occasionally, a patient complained that a student had neglected to wash his hands to the patient's satisfaction but no instructor or assistant reminded the students to wash. Instructors usually stopped at a sink to wash their hands if they had to participate in the treatment of a patient or examine a student's progress. In the oral surgery clinic, students and instructors were required to "scrub" at a foot-operated sink and were prevented from touching "nonsterile" articles by the assistants. Ms. Tomasso paid close attention to the availability of "sterile" towels, implements, and patient drapes. The sterility of any of these articles after their exposure to the air in the clinic is doubtful, however. After a patient had been draped by an assistant, he would be admonished by an assistant if he attempted to scratch or touch his face or hair with his hands.

Another practice which appeared to reflect a ritualistic custom was the use of special uniforms in the oral surgery clinic. Uniforms are recognized as serving several important manifest and latent functions in the social system of medical institutions. They are used to facilitate the identification of staff members and patients and allow the differentiation of various personnel by status. This function has been affected by the increase in specialization and the use of paraprofessional personnel in health care settings. A woman wearing a white uniform, for example, can no longer be

presumed to be a nurse. Both technicians and physicians wear white coats.

In the dental school, as in the medical school, students wear uniforms designed to designate their status as students. Undergraduate students wear different color jackets than graduate students. Regardless of their attire, women in the clinic are often assumed to be hygienists. In the dental school, students routinely wore either a white "intern's" jacket with a shirt and tie or a white dental tunic. These uniforms are issued during the first year of school to be worn by students whenever they are in the school clinic.

The oral surgery clinic has its own dress code. To begin with, more overt emphasis on the display of appropriate uniforms was noted in the oral surgery clinic than in the other clinics. The observer, and any women dental students, were required by Ms. Tomasso to wear caps to cover their hair. This was done to help maintain the surgically aeseptic environment. Male students with longer hair were also asked to wear caps. Instructors are issued long, green surgical caps and gowns for use while in the surgery clinic. Instructors in the other clinics wear white laboratory coats alone. The assistants in the oral surgery clinic wear white uniforms, caps, shoes, and hose similar to those worn by nurses.

The practices described above were described as "silly" by the clinic's dental assistants and served as a focus of conflict between Ms. Tomasso, who supported them, and the remaining assistants. One morning, on arriving to observe in the oral surgery clinic, the observer noticed plants for

the first time on the clinic window sills. She stopped to ask one of the assistants, Ms. Berkowitz, about the new decoration. Ms. Berkowitz replied that she places them there every morning but that she has to remove them. "Mrs. Tomasso doesn't want them there. Sterility! The plants aren't sterile! The dust on the window sills is sterile. Nothing is sterile! She doesn't see it. . . The patients would like it too. It looks better."

Seeing the plants again on another occasion, Ms. Berkowitz was asked if Ms. Tomasso had consented to having them in the clinic. "No. She hasn't noticed them yet . . . Dr. Martin [one of the department co-chairmen] liked them. It's like a concentration camp. Like your hat."[13] This same assistant was overheard later in an argument with Ms. Tomasso about the purpose of having the observer wear a cap in the clinic.

Priorities: Patient Care of the Maintenance of Procedure

The conflict between the goals of patient care and the enforcement of clinic procedures in the oral surgery clinic was evident in a variety of instances observed. Sometimes the practice of a ritual or procedure took precedence over providing treatment or relieving suffering. It was as though it were assumed by the assistant who enforced them that the neglecting of a procedure would diminish the quality of care patients would receive.

On one occasion, Dr. Miller, one of the co-chairmen of the clinic, informed the chief assistant that, from then

on, students were to obtain blood pressure readings for all patients seen in the clinic before performing any extraction. On some days, this rule was enforced, particularly when this instructor was present. On many occasions, it was ignored. At times, it appeared to impede the delivery of care--particularly when inexperienced students spent long periods of time attempting to learn the techniques for obtaining such measurements on "emergency patients."

One patient complained to a nearby assistant, "I wish I didn't have teeth in my head. Ooh, it hurts. If I knew this was gonna hurt like this I'd have had it out a long time ago!"

A student approached the patient and said, "I'll do it. Let me wash my hands."

Ms. Grimes stopped the student saying, "You're doing a blood pressure first, Doctor." The student then attempted to locate the patient's pulse and take the blood pressure reading while the patient continued to complain of serious pain.

Another patient was overheard complaining of pain. Three students attempted to obtain a blood pressure reading. Finally, one student addressed the patient asking, "You here for an extraction?" The patient told him about how much pain she was experiencing. The student examined her x-rays and announced that the tooth should be saved and the patient referred to the eighth floor clinic.

One patient complained to the observer while waiting

to be attended to in the clinic. "I don't believe this shit. I'm supposed to be in "Emergency." I'm in pain. They call my name--take my money . . . I just asked him [points to a student] something and he says he's a trainee. Heavy. Heavy. Can't I get injected and get this [tooth] out? What is this?" Most patients did not react verbally to being ignored in the clinic. The way they are ignored and the way procedures which appear to have little relationship to the quality of care they receive get priority raise questions about whether the priority of the clinic is the treatment of patients or the maintenance of the clinic's own autonomous social structure.

Student Role Identity

The norms for interpersonal relations were taught in a variety of ways in the oral surgery clinic. Some are embodied in specific rules, others are less concrete. Even those designated as rules are routinely violated or ignored. As with the norm for providing home care instruction, where a printed sheet is available and students are theoretically threatened with failure for not complying, instructions were provided by students in less than one fourth of the observed procedures.

Some norms are taught through faculty role models. However, discrepancies in the models displayed make the identification of a rule to follow difficult. In some instances, a norm may be apparent but it is unclear who is expected to comply with it. Who should respond to the patient's emotional

needs--the student or the assistant? At times, for example, it appeared as though the student's sole role in the dentist-patient relationship was mechanistic and impersonal, as an extractor of teeth--the "activity-passivity" model.[14] Instructors did not encourage students to talk with their patients. The student's relationship to the patient often consisted of his coming over to an already prepared patient, extracting a tooth, and walking away. This was frequently done without a word to the patient. Any instruction to the patient often came from the instructor or assistant present rather than the student.

Neither students nor instructors commented when the assistants assumed the responsibility for dismissing nervous patients, rescheduling patients for treatment under general anesthesia, and humoring mildly anxious adult and juvenile patients. These activities, then, are accepted to be the responsibility of the assistants in the clinic. They are not a part of the students' education in oral surgery. The students' responsibility in the clinic is to acquire the maximum experience in exodontia alone.

The student receives contradictory messages about what the important aspects of care are. Attention is given to a patient's comfort and the relief of pain but these aspects are less important aspects of the dentist's role than the mechanical. These aspects can be delegated to an assistant. Only the dentist can perform an actual dental treatment procedure. This contributes to the ambivalence of the situation.

The student's identity as a professional is not yet firmly established. The student may vacillate between the role of patient and the role of dentist while in the clinic. Giving up the nonmechanical aspects of the dentist's role can serve to help the student detach himself from the patient.[15]

There were several examples in the research data of students identifying with the oral surgery patients. One student, after observing an intravenous injection, appeared to blanch and turn away. The observer asked if he would like some water. He replied, "I hate needles. They make me sick. Watching them and giving them." Another student also blanched while observing several extractions being performed on a patient with a fractured jaw. The observer asked the student how he was doing. He replied, "So-so." The observer asked, "What's the matter?" "When they scream, I always get sick."[16]

While talking with one junior student in the oral surgery clinic, the observer commented on how she doesn't like observing in the clinic because it makes her feel ill. The student said it makes him feel sick when he puts himself in the patient's place. It doesn't bother him when he looks at it from the point of view of the doctor. A senior student told the observer, "The first time I watched an instructor do a drainage in oral surgery, I felt sick and thought I would faint. The next period, I did the same procedure myself and felt fine. Then, the next time, I watched it being done again and, again, I felt sick and faint!"

The students' ambiguity about their role in the clinic

is characterized by the following conversation following an announcement by Ms. Tomasso that no instructors would be present that day.

Henry: "I think we'll be able to split."

Ralph: "How come?"

Henry: "No doctors."

Ralph: "What are we?"

NOTES

[1]The instructors observed taught in the clinic during one period each week, practicing in their private offices during the remaining time. One was a resident at an affiliated hospital.

[2]The author, who conducted all of the clinical observations, will be referred to as "the observer" throughout the report.

[3]The handles of the overhead lights were covered with brown paper "lunch" bags reportedly to help preserve the sterility of the surgeon's hands when he found it necessary to adjust the position of the light. It looked like a strange custom, so the observer inquired about it and learned its function.

[4]A special sink equipped with foot controls was used for the surgical scrubbing. Special "sterilized" paper towels were left adjacent to the sink for drying.

[5]An early, or preoperative decision, may be made concerning whether to utilize local or general anesthesia initially but the method for pain control, not whether or not to use any method, is what is questioned. In the operative clinic, on the other hand, students often had to negotiate with certain instructors for permission to use anesthetics.

[6]See Chapter VIII.

[7]See Table 12,Chapter VI, p. 125.

[8]Eight patients were twelve years old or younger, four were teenagers, seven young adults, five middle-aged adults, and nine were elderly people.

[9]See Chapter VI, pp. 132-134.

[10]Barney G. Glaser and Anselm L. Strauss, Awareness of Dying (Chicago: Aldine Publishing Company, 1965), p. 30.

[11]Robert K. Merton, "Manifest and Latent Functions," in Social Theory and Social Structure (New York: The Free Press, 1968, pp. 73-138.

[12]Raymond Aron, Main Currents in Sociological Thought II, Anchor Books (Garden City, New York: Doubleday and Company,

Inc., 1970), pp. 267-280.

[13] As pointed out, all women and men with longer hair are required to wear caps while treating patients in the oral surgery clinic. On her first day in the clinic, the observer was asked by Ms. Tomasso to wear a cap. Other assistants argued that this was unnecessary as the observer would not be involved in treating patients.

[14] See Chapter III, above.

[15] Talcott Parsons, The Social System (New York: The Free Press, 1951), p. 434; Robert K. Merton, "Some Preliminaries to a Sociology of Medical Education," in The Student Physician, ed. by Robert K. Merton, George Reader, and Patricia L. Kendall (Cambridge, Massachusetts: Harvard University Press, 1957), p. 74.

[16] The observer found it interesting that, on several occasions, she observed apparent student discomfort, including one occasion where a student appeared to faint after accidentally cutting his hand quite deeply on an instrument, but that she was the only person present who reacted to it. Such occasions were ignored by peers, instructors and dental assistants--and by the patients as well. Such behavior is probably regarded as "unprofessional" by peers, as suggested by an incident involving two behavioral scientists in the oral surgery clinic. On the first day in the clinic, the observer met a male anthropology student who was also observing for the first time in the clinic. His objective was to learn some rudimentary skills to use while doing field work in South America later that year. He fainted while observing his first extraction. Later, he asked the observer to join him for coffee and explained that he wanted to account for his behavior in the oral surgery clinic. He said he was not embarrassed in front of the surgeons or students but felt embarrassed about having fainted in the presence of a peer, a fellow social scientist.

CHAPTER VIII

COMPLIANCE WITH NORMS FOR HUMANE CARE IN THE OPERATIVE CLINIC

Routine Treatment Procedures

Routine dental treatment provided in the operative dentistry clinic is in some ways very different from that in oral surgery. It is similar in that a routine pattern of ostensibly rational procedures is followed with each patient. It is most notably different in that in oral surgery, the objective is to remove a tooth, while, in operative, the objective is to repair a damaged tooth and restore its function. Operative treatment is viewed as "preventive" in that a diseased tooth is saved. Oral surgery represents the ultimate failure in dental treatment as the tooth is, as a patient for whom there is no longer any hope, lost. As in oral surgery, where a justification involving the patient's welfare can account for the step-wise procedures employed and the intervention of faculty and assistants, a similar justification defends practices in operative. Here, however, the danger to be avoided is a mechanical exposure.[1]

Unlike oral surgery, the position of the operative division, while not representative of a legitimate practice specialty, is relatively secure in dental education. Clinical operative technique is tested, along with prosthetics, on the

regional board exams for licensure. It is, therefore, imperative that the school prepare its students to pass their licensure examinations so that they can practice dentistry. The chairman of the department at Highbridge has been named associate dean of the dental school, thus giving the department additional prestige and influence in the school.

When a student is assigned a patient for operative dentistry, he is responsible, according to school policy, for completing all of the operative procedures required by that patient.[2] The patient is expected to come to the clinic, as scheduled, each week for an entire morning or afternoon clinic session until his treatment is completed. At each visit, he pays the clinic cashier for his treatment. Students do not collect clinic fees from their patients but cannot continue treatment that is unpaid for. In the clinic, treatment progresses at a much slower rater than in a private office.[3] It is likely that a student will see the same operative patients through a semester. Some patients remain in treatment throughout the student's third and fourth years.

A procedure in the operative clinic is likely to take several hours at a minimum. The patient expects to be seen for treatment in one clinic during his entire scheduled appointment by the student to whom he has been assigned. The student knows which patient he will be treating and what procedure he will be performing on a particular day,[4] though there may be variations in the patient's treatment plan.

A student assigned to the operative clinic brings his

mobile instrument cabinet to his designated chair and arranges his instruments on top of the cabinet and bracket table. He sets-up the patient's x-rays on the x-ray viewer. The patient, if seen before, usually comes into the clinic, locates the student's chair, removes his coat, and takes his seat in the chair. Rarely did a student acknowledge his patient's arrival. The patient might greet the student. He would then sit in the dental chair until the student is ready to begin. A new patient may be met in the waiting area outside of the clinic by the student and led into the operatory area.

The student usually begins by calling over an instructor to obtain permission to commence the planned procedure, or to discuss what should be done next and how to do it.[5] Then, they may discuss whether or not to use anesthesia. If the instructor approves the use of anesthesia, the student is given a signed requisition slip to bring to the central supply desk for the approved carpules. The student then leaves the patient alone while he obtains the anesthesia. When he returns, he gives the patient the injection and prepares to apply the rubber dam.

Students leave their patients alone at various points in the treatment, most often without any explanation of where they are going or when they will return. Often, the student leaves to locate an instructor, obtain supplies, or wash his hands, as he might in a private office. However, given the size of the clinic, doing so may take several minutes and may take the student out of the patient's visual

range.

The Rubber Dam

It was observed that a great deal of time and effort was expended in the application of the rubber dam in the operative clinic. The use of the rubber dam is required by both the operative and the endodontics departments for all treatment.[6] Several faculty members point out that, despite the amount of time spent in teaching its use and the emphasis placed on it in the school, with the exception of endodontic procedures, it is rarely used in private practice. (Students also must apply a rubber dam on their State Board patients when they perform operative treatment as part of the licensing examination.)

The dam is used to isolate the tooth being treated from the oral environment, thereby maintaining a dry, saliva-free operating field.[7] It prevents foreign material from going down the patient's throat. It also makes it impossible for the patient to close his mouth or talk. Thus, in the clinic, the dam serves the latent functions of preventing verbal interruptions and keeping the patient's mouth open. The discomfort this causes the patient is intensified because of the extensive period of time the patient must wear the dam in the school clinic.

For junior students in particular, the application of the dam occupied much of the treatment period. Most students had difficulty putting the dam on their patients. In order to apply the dam, a prerequisite to beginning any operative

treatment, the student must place a clamp in the patient's mouth; punch a hole in the sheet of rubber which constitutes the dam itself to expose the appropriate teeth; and place a napkin and the dam over the clamp and holder assemblage. A suction device attached to a plactic saliva-ejector was then placed under the patient's tongue.

Patient's complained about the discomfort from the clamps, which fit tightly around the teeth and serve to separate them. If additional anesthesia is required while the treatment is in progress, the dam may have to be removed, making the subsequent administration of anesthesia difficult, annoying, and time consuming for the student. Given the pressures from a number of sources to complete a procedure, it is not surprising that some students are reluctant to subject themselves to the bother of readministering anesthesia during an operative procedure.

One student was observed repeatedly checking the patient's lip and asking if she was experiencing the effects of the anesthesia. He explained, "I don't want to put the rubber dam on and have to take it off again!" Students who found they did not have adequate anesthesia once the dam was in place attempted to convince their patients to endure the treatment without anesthesia.

One student explained to the observer, "I don't talk to my patients. I tell them this. I like to concentrate on what I'm doing so I don't talk to them.

"The dam alienates you from the patient. They can't

talk. I've had dam myself so I know what they are experiencing and I try to make it as comfortable as possible.

Students expressed their frustration over the required use of the rubber dam and bewilderment about why a more difficult dam apparatus was utilized in operative than in endodontics. As one said, "Isn't strange, in prosthetics and perio they let you give the injection. Only in this department [operative dentistry], they have to supervise it. In endo, they use one rubber dam clamp; here, this one. They [the operative faculty] want you to punch the holes a certain way [in the dam]. They say, 'Well, we do things differently here.'"

The operative dentistry division is known throughout the school for its regimented procedures to an even greater extent than the oral surgery department. Many students describe the operative department as their "favorite" because they always feel they know what is expected of them and what rules are. The standards are set and do not vary. As a junior student pointed out to the observer one afternoon, "I think you'll find we're pretty regimented." He was asked what he meant by that. "There's a law. A law of procedure."

Regardless of the function or consequence of a procedure, the fact that procedures did not vary was comforting to some of the students in the operative dentistry clinic.

Symbolically and actually, the rubber dam, in isolating the teeth being treated, serves to focus attention on these teeth alone, thereby obscuring their position in the mouth

and as part of a person. It served to hinder patient communication with students and instructors. It also makes it necessary for patients to keep their mouths open throughout the long periods required for treatment.

Anesthesia and Pain Control

In the oral surgery clinic, pain is an anticipated concomitant of the treatment. One operatory is arranged and equipped expressly to facilitate the use of various forms of intravenous and inhalation sedation. The assistants routinely sterilize syringes and anesthesia carpules and maintain supplies of anesthesia and topical anesthetics. It is a norm that patients receive anesthetic injections, following the application of a topical anesthetic, before any extraction is begun. No student or instructor was observed starting an extraction without first providing anesthesia for the patient. Additional injections of anesthesia were given just as routinely. During extractions, instructors suggested using more anesthesia to students if the instructors inferred that patients appeared at all uncomfortable. Prescriptions for pain symptoms were provided for some patients to use at home as well.

In the operative clinic, on the other hand, the administration of anesthesia was not treated as routine. It was said that its use was, in fact, discouraged by members of the operative faculty in the belief that the student would be better able to judge the depth of a cavity preparation and would work more slowly and carefully, thereby avoiding exposing the

pulp of his patients' teeth, if the patient was not given anesthesia. This practice also represents a philosophy of avoiding an indiscriminate use of drugs.

Having the instructors responsible for authorizing the use of anesthesia for patients served to allow some to use this right as a means of controlling students and emphasizing the status differences between the student and the instructor. One conversation was overheard between a student and his instructor, Dr. Boynton, in the operative clinic which was typical of Dr. Boynton's way of relating to his students and his approach to authorizing anesthesia for patients. The student approached the instructor, who was attending to another student and patient. When Dr. Boynton looked up, the student asked, "Can I have anesthesia, Sir?" The instructor responded, "What for?"

Student: "A patient with a tooth that's gonna hurt, Sir."

Dr. Boynton: "How do you know?"

Student: "Want me to try it without?"

Dr. Boynton: "No. Here." (signed authorization slip)

Student: "Thank you, Sir."

The student reaction to the department policy is varied. Some were overheard attempting to justify their requests for anesthesia after an instructor was reluctant to allow it. Sometimes students claimed that their patients had threatened to leave the clinic if they had to endure treatment again without anesthesia. Other students endorsed the policy, saying

they liked "knowing how deeply they had penetrated" the patient's tooth.

One student proudly told the observer that his patient doesn't take anesthesia. "He never takes anesthesia. It's really nice. He even endures my wrath more than anybody else!" The observer asked the student why he thought it was "nice" that his patient did not accept or request anesthesia. The student responded, "It saves me time. I like to know when I'm going deep. I like to know when they feel it. He never complains. But once I had to pull him off the ceiling! I never take anesthesia . . ."

It appears as though many were ambivalent about their feelings about using anesthesia in the operative clinic. On the one hand, the students generally claimed to be concerned about giving patients good care and not hurting them. On the other hand, to get through school, the student must miminize his conflicts with his instructors. Students provided two types of rationalizations for not using anesthesia for operative treatment. Both are claimed to be in the best interests of the patients involved. First, some students suggested that the patients preferred not having anesthesia since they dislike the sensation of numbness. A feeling which some patients have is then generalized by the student for other patients: "It is better if you don't have anesthesia. You won't like the feeling of having your face numb for a few hours anyway."

A second reason given for not using anesthesia was based on some students' nervousness associated with doubts

about their own ability to give an injection without harming a patient. Students fearful of using a syringe were relieved when they did not have to do so. The use of such rationalizations reflects the students' frustration over the conditions in which they practice.

The Student-Patient Relationship

In Chapter III above, treatment in the operative clinic was compared with medical treatment for acute disorders. The dentist-patient relationship in such a setting was expected to exhibit characteristics of the patient-practitioner relationship described in the Szasz-Hollender typology as "guidance-cooperation." Many of the objective features of the actual treatment seem in themselves conducive to such a relationship. Despite this and the verbal acceptance of related norms by the school faculty, features of the treatment setting appear to mitigate the student's ability to acquire and demonstrate compliance with these norms.

In the guidance-cooperation model, it is assumed that the patient is conscious and aware of his treatment and able to cooperate with the doctor in effecting it. As Freidson recognizes, however, characteristics of the physician's role may discourage him from fully enlisting the patient's cooperation or support in treatment.[8] The patient may be denied both access to information and a role in the decision-making process relevant to his treatment plan. In planning treatment, the patient's objectives in seeking care are not considered. The basis for selecting a treatment modality

reflects the objectives of teaching required operative techniques and affording students maximum opportunities to gain practice in those techniques commensurate with their present ability. Here, even the overly compliant patient is not rewarded through a show of concern in response to his discomfort.[9] For example, less than 20% of the students observed responded to their patients' nonverbal cues. Verbal complaints of pain were also summarily ignored. Neither was concern shown through the routine prophylactic use of anesthesia as it is in oral surgery. Here, procedure takes precedence over people. Only 30% of the students addressed their patients by name. Students and patients alike routinely suffered through the application and inconveniences of the rubber dam. Students and faculty made no overt effort to mitigate the discomfort caused by the dam. A comprehensive approach, indicated through a concern with the patient's preventive health behavior and oral hygiene, was largely absent. Responsibility for the patient after he has left the clinic was not demonstrated, required, or encouraged.

In the operative clinic, half of the students observed were judged to have established some level of rapport with their patients. This may be, in part, a function of their repeated contact with the same patients over extended periods of time. Nearly two-thirds of the students in operative made some explanation of what they were doing to the patient. In many ways, the organization of the clinic setting, with its rational procedures for objectively adequate care, seems to

obstruct the provision of humanistically sensitive care. The faculty role-models present appeared to do little to endorse the norms they acknowledged on the questionnaire in the school clinic. Little routinization of "humane" procedures was evident, nor was there routine instruction by the faculty in methods for conforming with expectations for providing psychosocially sensitive care.

Patient Reaction to Clinic Policies

One example of the incompatibility of the clinic format and the practice of humane care centers on policies about the use of anesthesia for clinic patients. In 1969, a group of community residents staged a brief protest on the seventh and eighth floors of the dental school. They objected to the fact that anesthesia was not used routinely for operative dentistry. They claimed that the school was deliberately intending to inflict pain on its Hispanic patients. The operative department policy was to use local anesthesia as little as possible. The chairman wished to avoid the use of any "unnecessary medication." The patients were assured that the school was protecting their welfare. These protesting patients received only limited support from few of the students in the school who brought the patients' issues before the student council for discussion. The protest was short-lived.

The dean issued a directive to the operative department instructing the faculty to authorize the use of anesthesia for operative patients <u>as indicated</u>. There remains a reluctance on the part of some operative instructors to authorize the use

of anesthesia, which is freely prescribed routinely in the other clinics. It is rationalized by some operative instructors that students have a better sense of how close they are to the pulp of the tooth if the patient is unanesthetized, thus reducing the danger of pulp exposure.

This patient uprising was part of a general protest by area residents against the hospital complex at a time when patients were realizing their rights to receive adequate medical care. Community residents had been picketing the hospital complex, specifically the Gotham Clinic. They indicated that the clinic facilities available were not responsive to the needs of the present community population. Specifically cited problems included inadequate emergency facilities, prompting the construction of a new emergency care wing, and the unavailability of emergency dental care after school hours. The dean's directive to the operative department was aimed at preventing further community and student actions against the school similar to those disrupting campuses throughout the country during this period.

Student Reaction to Clinic Policies

There has been a general call, indicated by the committees on admissions within the organized dental education community, for better selection policies to recruit students more potentially humane and ethical into the profession. It is believed that, while policies aimed at recruiting those most successful in collegiate studies have attracted those intellectually capable of mastering the dental curriculum,

dental students have been less successful in their interpersonal relationships with patients. Student support for the patient protest was limited. This may be in part due to the limited power students perceive themselves to have in the school and to a desire to maintain anonymity and "not make waves" in an effort not to draw negative attention from a faculty responsible for subjectively evaluating student performance. However, as suggested by other examples of innovative behavior by students in the clinic (where students break various clinic rules in an effort to provide their patients with dental care), insensitivity, cynicism, and lack of ethics may not be intrinsic qualities of dental students but traits required to successfully pass through the period of dental training. These may be the necessary traits required to provide care to patients in a setting where norms are incompatible with those aspects of psychosocially sensitive care deemed desirable by the public and the profession.

NOTES

[1]An exposure is a violation of the pulp of the tooth, the living portion containing the blood supply and nervous tissue. The violation can be either "carious," by decay, or "mechanical," involving the violation of the pulp by foreign matter introduced by the dentist, e.g. an instrument. When an exposure occurs, the tooth requires some type of root therapy, i.e. endodontics, or it is likely that the pulp will "die."

Such an occurrence is an annoyance to the student as it implies the patient will have to be referred to endodontics before the original student can complete operative treatment. Early in their clinical experience, students especially fear exposing a tooth as their clinical judgment and dexterity are relatively poor. Doing so is viewed as a failure on the student's part.

[2]If the student graduates, however, he assigns the patient to another student. The treatment may be interrupted by the necessity to refer the patient to a student in another department for treatment, e.g. and endodontics.

[3]A filling in a private office is usually completed in less than an hour. It often requires two full clinic periods.

[4]There are five types of cavity categories, referring to the location of the decay on the tooth, each necessitating a different cavity preparation. There are also several types of appropriate filling materials and procedures, some involving the use of a cast gold.

[5]Students "call instructors over" either by signalling verbally or with hand gestures, if an instructor is nearby. Sometimes a student must locate an instructor, or wait until one has finished talking with another student, and then ask him to come over to the student's chair.

[6]While both departments require students to use a rubber dam while treating patients, each requires a different type of dam assemblage. The assemblage required by the endodontics department is described as easier to apply and more comfortable for the patient.

[7]In this section, it is not the author's intent to evaluate the relative merits of the use of rubber dam for operative dentistry. The author wishes only to emphasize the way the dam is employed in the dental school operative clinic

and its subsequent effect on the dentist-patient relationship in that clinic.

For a detailed description of the rubber dam and its use see Chapter 7, "The Operating Field," in H. William Gilmore, Textbook of Operative Dentistry (Saint Louis, The C.V. Mosby Company, 1967), pp. 202-240.

[8]Eliot Freidson, Profession of Medicine (New York: Dodd, Mead & Company, Inc., 1970), pp. 314-315.

[9]See Chapter IX below.

CHAPTER IX

THE STUDENT-PATIENT RELATIONSHIP

Patient Cooperation

The relationship between the student and the patient in the operative clinic is very different from that in the oral surgery clinic. In treating the operative patient, the student must spend longer periods of time with the same patient. He is more dependent on the patient for cooperation in completing treatment. The patient he has scheduled must come for his appointment or the student cannot receive "credit" from his instructors for the clinic session. Learning to do fillings is considered an important aspect of dentistry by most of the students and they are, therefore, anxious to have adequate opportunities to practice the procedures they will need to actually practice dentistry and to pass their State Board examinations. The patient's cooperation, particularly given the demands of the prolonged treatment period and the discomfort of the rubber dam and minimal anesthesia, become essential to the student. Here, unlike in oral surgery, the patient is defined as the "student's patient," making the student, by extension, responsible for the patient's behavior in the clinic. Patients are not expected to argue with instructors. They are expected to show up for appointments and make their payments. They are expected to accept the treatment

plan offered to them and not to complain or otherwise disrupt the operation of the clinic.

Acceptance of Treatment

The patients observed in the operative and periodontics clinics were amazingly compliant and complacent. There were no complaints about the students. Several complained about the treatment received from instructors, telling their students they would not return if the same instructor as the week before came over. If left alone for five minutes or half an hour, patients continued to sit quietly in their chairs awaiting the student's return. Some sat with their eyes closed. Others read. Some spoke with the observer about the observer's role or about the student's. It may be that, in a situation where the extensive periods of time required for treatment have been accepted by the patient, the student's absence is accepted as just one more inconvenience of clinic care. When students left their patients alone, rarely did they account for their departures to the patient. Sometimes, however, explanations of where the student was going were made to the observer.

When the complacency of patients in the clinic is mentioned to the instructors, they point out that clinic patients are carefully screened and made aware that this is a dental school and that the student's education is the primary objective.[1] The similarities in the behavior observed may be due to several factors. The first is socialization. The patient has opportunities to observe both other patients and

students to obtain cues about how a patient should behave in the clinic. The student's silence while operating in the patient's mouth may suggest to the patient that the student is diligent and conscientious.[2] As the patient is fully aware that his dentist is a novice, he may think it prudent not to interrupt the student's concentration with either "unnecessary" questions or complaints.

Another explanation which may account for the patient complacency, beyond natural cooperation, is that the patient may identify with the student's role. The dental patient relinquishes varying degrees of control during treatment. He allows the dentist to have access to a sensitive area of his body, allowing the introduction of instruments which could cause mutilation or discomfort. The patient may view the student to be in a position similar to his own--as the clinic "underdog," subservient to and dependent upon his instructors. The student and the patient become allies in a sense, the patient cooperating to aid the student, who rewards the patient through his diligence and care.

Some patients, aware that the students are not paid for the care they provide, attempt to give the students cash or other gifts. While students are officially not permitted to accept "tips," or any remuneration, several discussed gifts and money they had accepted from patients.

In the operative and periodontics clinics, the main problem students were observed to have with patients was the patient's lateness or absence from the scheduled clinic

appointment. Many of the observer's attempts to observe a student with a scheduled appointment were thwarted when the patient did not arrive or arrived an hour late. A patient who repeatedly "disappoints" is dropped from the clinic. No attempt by instructors to help students handle late or absent patients was observed.

The Triad: Patient-Student-Instructor

The predominant complaint heard from patients concerned the instructors. Several mentioned to the observer their dissatisfaction with the way the instructors treated them and the students, and the contrast between the care and attention they believe they receive from their student-dentist and the instructors.

In the Human Behavior Seminars for the sophomores, a consistent theme is the contrast the students perceive between the way they and their instructors treat their patients. When students begin treating clinic patients they express considerable concern about hurting patients. In particular, they cite how cruelly they believe the periodontics instructors treat their patients. They claim that they themselves treat their patients gently while the instructors are described as overly rough with patients and less considerate of their patients' comfort. Their second clinical experience is in the operative clinic where they observe the same trend and are critical of the instructors' reluctance to allow them to use anesthesia.

One student described his impression of the differences

between instructors from the different departments saying,

> I hate operative clinic. I dislike the instructors and the atmosphere is gestapo-like. When you make mistakes --I don't make them purposefully. That's what I'm here for. They're very untolerant of anyone's mistakes. I haven't learned anything in operative since I was a junior. The perio instructors are human beings. They come over and show you what to do . . . The majority of operative instructors, the patient is not even there. It's like working on a mannequin. I've been in their offices and they treat their patients the same way.

The observer then asked the student if he believes this affects his relationship with his patients. He replied,

> Uh, tremendously, tremendously. A guy like Dr. Dolan, if not in perio but in operative, would say, "That's no good! Do it over!" The negative attitude breaks me down. Sends me running for my valium.

Patients frequently expressed their loyalty and appreciation of the students. They indicated their awareness of the differences in the way they are treated by instructors and students. One told the observer that the students were much less "formal" than the instructors in the way they related to patients. This may be an indication that the students, who are less sure of themselves, exhibit less detachment and depersonalization of patients than instructors. As this patient described it, the students "personalize treatment more than the faculty does." She said that the instructors only say "open" to the patients.

> The students haven't lost their humanness yet. I hope some of them don't. Is it the expectation that the faculty will change their [the students'] expectations? The students teach one another. I see it. Do you know if there's a course in "mouth-side manner" or if they just pick it up?

Rapport and Responsiveness

Rapport

Rapport between the student-dentist and his patient was noted to exist in less than half of the observations. (Table 22) In these observations, joking between students and patients, conversations not related to dental treatment, and physical contact not associated with the treatment directly were considered to be indicators of rapport.

TABLE 22

INDICATIONS OF RAPPORT BETWEEN STUDENT AND PATIENT BY CLINIC (IN PERCENTAGE)

	OPERATIVE (N=50)	PERIODONTICS (N=34)	ORAL SURG (N=41)	TOTAL OBSERVATIONS (N=125)
RAPPORT	48	50	32	43
NO RAPPORT	52	50	68	57

There were examples of patients and students laughing during treatment, students asking about some personal matter which had been discussed with the patient during a prior appointment, and students patting patients gently on the arm or head comfortingly before leaving the chair to obtain supplies. Rapport was also suggested by conversations about past experiences shared by the student and patient. Some of these concerned instructors either liked or disliked by both. Some students sought assurances that they were doing well, were

appreciated, or were liked by their patients. Some displayed rapport by "personalizing" treatment through the use of the patient's name, or by telling the patient directly that something was being done especially for him.

One student described how important patient feedback is to him in relation to his personal satisfaction with his work. He believes the way he feels reflects his perception of his patients' feelings about him. He did not believe, however, that many of the other students used feedback from their patients as a basis for their self-evaluation as he did.

Besides providing a comfortable atmosphere for the anxious patient, the relationship between the student and patient was perceived by the students as contributing to their own sense of comfort while in the school clinic. One student in periodontics discussed with the observer how he believes a patient's nervousness affects not only his ability to perform the required procedure but his ability to establish rapport with the patient as well. Another discussed how important it is to him to have the patient feel confidence in him.

In the periodontics clinic, a senior student expressed his belief that developing rapport with a patient puts additional pressure on the student to provide competent treatment. Not only must the student satisfy the instructors, but if the student sees the patient as a person, he feels added responsibility for the success of the procedure. Periodontal surgery is not always successful in saving a patient's teeth.

Detachment from the patient enables a student to accept a failure as the failure of a procedure, without having to accept the significance of that failure for another person.

A norm which received support from faculty and students alike on the questionnaire, which presumably would be associated with rapport and indicative of a relationship in which the patient is viewed as a person, is the norm about using the patient's name during treatment.

Students were heard calling their patients by name in just over one fourth of the observations recorded. (Table 23) Usually, patients who were referred to by name were addressed by their surnames, as "Mr. Smith" or "Mrs. Jones." Younger patients were referred to by their first names. Children and those perceived as peers of the student were called by their first names. Twice, instructors were heard addressing oral surgery patients by name when the student attending to the patient had not. Two students referred to their patients by name when speaking with the observer but did not address their patients themselves by name during treatment.

Patients, who did very little talking if any during their treatment, were not heard addressing their students by name either very often. Some referred to their student-dentists by their first names, others used "Dr._____." Rarely were instructors referred to by name by patients. Usually any discussion of an instructor cited "the doctor," or "the instructor who was here last week" instead of an actual name.

TABLE 23

STUDENT USE OF PATIENTS' NAMES DURING TREATMENT BY CLINIC (IN PERCENTAGE)

PATIENT'S NAME	OPERATIVE (N=50)	PERIO (N=34)	ORAL SURG (N=41)	TOTAL OBSERVATIONS (N=125)
USED	30	32	17	26
NOT USED	70	68	83	74

The students and instructors all wear pins with their names printed on them. Yet, a patient in periodontics asked what his student's name was while the student was absent from the chair. The observer suggested that the patient ask the student. He replied, "No, he has a name plate. I ask him so many questions . . . I'll ask him when I go out." This patient's reluctance to question his student-dentist may reflect the patient's belief that it is inappropriate to ask a question during a clinic period. That the patient had forgotten his dentist's name suggests that this patient may have had little opportunity to use the name, may not have been told the name, or that in the typical interactions between the student and patient the use of names was considered unnecessary.

Another patient described her experiences as a clinic patient. She complained that, despite the fact that she was "older than his mother," a student who had been treating her formerly had called her by her first name and had even introduced her to some of his classmates again using her first

name alone. She described the student who was presently treating her as "the nicest man I've had. He's never rude, never been crude. A gentleman."

The way patient's names were used was not examined in a systematic way as they were used so infrequently. It was noted that patients were addressed by name when a student was attempting to reassure them or while discussing something personal which was unrelated to the treatment. Many students did not speak to their patients at all during treatment. During several observations, nothing was said by either the student or the patient during a period ranging from a half to three-quarters of an hour. In such observations, the patients were not addressed by name.

Two students in the operative clinic stopped to introduce their patients to the observer. They explained to their patients who she was and that she would be watching them that period. One told the observer what his patient did for a living as well.

Occasionally, patients were heard laughing at jokes made by their student-dentist or both the student and the patient laughed at something that they found humorous. One senior student, in the operative clinic, appeared to have established rapport with his patient. He told the observer, "Mrs. Harris and I would like to part company. I would like to finish . . . She would like to finish. Right?" Mrs. Harris replied, "Um hum," in agreement. They both laughed. The student then continued, "Although we get along

tremendously!" Here, as in other instances, the relationship established between the student and the patient made the less pleasant features of clinic treatment more tolerable for the patient, such as the waiting, the length of treatment, or the discomfort.

In other relationships observed, students and patients did not get along as well. This seemed to occur less frequently. One student stopped the observer to talk with her in the clinic. She asked him where his patient was.

Student: "She went to the bathroom."

Observer: "She's probably hiding from you!"

Student: "She ought to! I don't like to work on her --she knows it too!"

Some students helped their patients remove their coats or hats. One stopped treatment to get a patient's sweater when she was feeling chilled.

Nonverbal Communication

The "good" patient was consistently the patient who did not complain. Students reinforced this by telling patients how well they were doing despite the discomfort of the long sessions, the periods of waiting, the rubber dam, or the lack of adequate anesthesia.

Most complaints of discomfort were not made verbally by the patient directly to the student or the instructor. Most were made through non-verbal forms of communication (such as grimaces or body movements) which, most often, students and instructors chose to ignore. In comparing the

clinics, no differences were observed in the frequency of compliance with the expectation that students respond to non-verbal communications from their patients. Further, there were no differences in the frequency with which students responded to either verbal or non-verbal indications that their patients were experiencing pain in any clinic. (Table 24)

TABLE 24

STUDENT RESPONSE TO NON-VERBAL COMMUNICATIONS BY CLINIC (IN PERCENT)

	OPERATIVE (N=50)	PERIO (N=34)	ORAL SURG (N=41)	TOTAL OBSERVATIONS (N=125)
RESPONDED	18	15	10	14
NO RESPONSE	82	85	90	86

Every movement or lack of movement by the patient could be interpreted as a communication. Patients communicated their apparent comfort or discomfort to their student-dentists in a variety of ways. Some students acknowledged these communications, others did not.

Some students responded to their patients' movements. These students would stop the treatment and ask the patient how he was doing or if something was hurting him. Typical responses to the patient's complaint would then be to ignore it completely, apologize, give more anesthesia, or adjust the position of a clamp or instrument which was uncomfortable.

Another tactic was to assure the patient that the procedure would be completed soon.

One student commented that his patient "likes to make faces." Some students similarly denied that the discomfort or pain experienced by the patient was related to something the student was doing or had control over, accounting for the experience in some characteristic of the patient instead.[3] For example, when his patient grimaced during an operative procedure, a student told her she had "very sensitive gums."

One periodontic patient stopped the student saying, "It's very painful. Don't do it. I don't mind the blood, just the pain!"

The student responded, "After I get done with him, I feel like I've been through abdominal surgery! He's a bleeder." The student was asked if he had administered anesthesia to the patient. He replied,

> No, I don't use anesthesia because I don't cause that much pain. Some people do. I don't. I'm careful. Sometimes I slip. I tell them [patients] to tell me when its painful anyway.

The patient interrupted and repeated, "It hurts." The student replied, "It's a deep pocket. My patients trust me. Pain is very subjective."

Some students continually asked their patients if they were "all right." Some ignored communications from their patients including grimaces, grabbing the arm rests, and actually jumping up from the chair. Others acknowledged each movement, groan, or grimace with some reassurance, or by asking how the patient was doing.

While generally, in periodontic treatment, students readministered anesthesia as necessary and were encouraged by the faculty to use anesthesia when a patient expressed discomfort, some students did ignore communications from their patients. One patient, when his moaning was ignored by both the student and hygienist treating him, sat up in tears to stop the treatment.

The observer confronted one junior student after an observation in the operative clinic and mentioned that she had noticed that his patient frequently looked up at the student's face as though he wanted to attract the student's attention. The observer suggested that it appeared as though the patient was asking how it was going or when the student would be done drilling, but that the student appeared to ignore her questioning glances. The student said, "Patients do that all the time. You can't respond to them all of the time!"

One afternoon, an instructor was demonstrating how to properly scale a patient's teeth. The student sat nearby. At one point, the instructor stopped to discuss the procedure with the student. When he did, he removed the instrument he had been using from the patient's mouth. On the end of the instrument was a glob of blood. The instructor held the instrument several inches above the patient's face as he talked with the student. While he spoke, the instructor moved his hand, causing the instrument to tilt from side to side over the patient's face. The glob of blood slid to the edge of

the instrument and, it seemed, just as it was about to spill off onto the patient, the instructor would gesture again, causing the blood to flow to the other side of the instrument. The patient followed the blood with his eyes while the instructor and student conversed, seemingly oblivious to the presence of the patient and the position of the bloody instrument above his face.

In the operative clinic, a patient signalled with his hand to the student drilling his tooth. The patient could not talk with the rubber dam over his mouth. The student responded, "You'll get an injection next week. You should try it without it once." In operative, students frequently suggested to their patients that they try to endure treatment without the anesthesia. This may be due to the tremendous inconvenience of obtaining and administering anesthesia in the operative clinic. Given the amount of time it takes students to complete operative procedures, it is likely that students would want to avoid any inconvenience which might prolong a procedure or the student's contact with his instructors.

One student in operative told the observer, "I refuse to talk to the patient so you can relax and go to sleep." He was one of many students who did not, in fact, talk with his patient at all during the treatment. Much patient communication was completely ignored, even when the patient tried repeated and more blatant methods of attracting the student's attention. One tried to make eye contact with the

student. When that failed, he closed his eyes. Then he actually jumped up. As the student continued treatment, the patient then grimaced. There was no reaction from the student to any of the patient's movements.

The operative instructors, as those in oral surgery, varied in the model they presented. None encouraged students to use anesthesia or to use more if a patient continued to complain of discomfort or pain. None engaged the patients in conversation or encouraged the student to relate to his patient. In one situation where the instructor was putting on the rubber dam clamp for the student, the instructor himself ignored the patient's grimaces and squirming. While proceding, this instructor continued to speak, but only with the student about the procedure. The conversation went on, uninterrupted, and the patient was ignored.

Unlike the operative instructors, the periodontics faculty seemed more concerned with the patients' comfort. One stopped a student saying, "If you had his head craned any further back, he'd be scratching his back with it!" The instructor then asked the patient, "Why don't you tell him [the student]? He thinks because he's comfortable . . ." Some instructors suggested to students that they administer more anesthesia even before a patient had complained.

One instructor in periodontics, while treating a patient with a student, stopped to ask the patient whether the student had provided medication for her pain at home following her last appointment.

Explanations of Treatment

Rarely were clinic patients actually alerted to what was being done to them or what they could expect. Students made no effort, when they did tell a patient something about the treatment, to determine whether the communication had been heard or understood, assuming, perhaps, that having said something once, any responsibility to the patient was fulfilled.

One communication problem observed was the use of jargon by students. Students appeared to have difficulty discussing dentistry with laymen in lay-language instead of in dental terminology. In one instance, a student explained his diagnosis of the conditions involving his patient's anterior teeth. When he finished the explanation, the patient asked, "What about my front teeth?" This suggests that the student's explanation had been meaningless to the patient who was unaware that "anterior" means "front."

Over 98% of the faculty responding to the questionnaire agreed that "Students should provide patients with a general understanding of the procedures and treatment." Ninety-five percent disagreed with the statement: "Rather than discuss what he will be doing with the patient, the student should proceed directly with the treatment."

Significant differences were observed in the amount of compliance with this norm in the clinics, $X^2=18.739$, $p<.001$. (Table 25) Those students observed were more likely to discusss what they were doing with their patients, or respond

to questions about the treatment from their patients, in operative dentistry than in oral surgery or periodontics. No differences were observed in the amount of compliance with this norm by juniors as compared with senior students.

TABLE 25

NUMBER OF OBSERVATIONS IN WHICH STUDENT GAVE EXPLANATION TO PATIENTS BY CLINIC (IN PERCENTAGE)

	OPERATIVE (N=50)	PERIO (N=34)	ORAL SURG (N=41)	TOTAL (N=125)
EXPLANATION	58	38	15	38
NO EXPLANATION	42	62	85	62

In only two observations, one in the operative and one in the periodontics clinic, instructors were observed providing explanations of the treatment procedures to patients.

The content and quality of the explanations observed varied to so great an extent as to make the classification or evaluation of each difficult. Some students explained procedures to patients in detail. Some merely informed patients about what was going to be done with no actual "explanation." Others routinely informed their patients about what was going on or what to expect.

One feature of some of the explanations and conversations was the vocabulary used by the student. As mentioned above, some students used jargon which confused their patients.

Another type of language employed included words commonly used to denote violence, mutilation or death. Students were rarely cautious about the words they used to describe a procedure, or in suggesting how the patient might feel. One told his patient, after injecting anesthesia, "I want your lip to get numb. Let me know when it gets numb. You'll feel like someone hit you in the jaw." Another student in the operative clinic commented to the observer, "I'm going to wipe out his tooth and his gums. I'll tell you about it. I'll tell you [the patient] about it too!"[4]

A number of student-patient communications were recorded in which the student described what was being done to the patient, or what the patient might experience, using words denoting violence, mutilation or death. Such words are inaccurate representations of the student's activities. Their use could present a problem in sustaining the social reality of the dentist-patient relationship.[5] The student, particularly in the school clinic setting, may have difficulty sustaining his perception of his role as the "dentist" in a treatment setting.

Other accounts could be given the the same behavior observed in the dental treatment setting occurring in other situations.[6] For example, a person could be allowed intimate access to another's oral cavity during sexual relations. In other settings where one might be subjected to pain or discomfort similar to that of dental treatment, the behavior enacted could be interpreted as a display of torture or punishment.

Joan P. Emerson describes the role of language in maintaining a medical definition of the situation in an analysis of means for sustaining definitions of reality during gynecological examinations.[7] One of the latent functions of the explanations of treatment given the patient in any treatment setting is to help sustain the definition of the situation by constructing the reality of a medical context. The dentist, or student-dentist, uses cues to inform the patient that this activity is defined as dental treatment. Thus, the intimacy displayed is not, for example, an indication of affection.[8] The techniques and possible pain to be experienced are accounted for as well. The patient is receiving treatment rather than punishment. To punish an uncooperative patient in this setting, treatment would, theoretically, be denied, not continued.

One conclusion drawn is that students appear to have difficulty sustaining definitions of reality while providing dental care to patients in the school clinic. This is demonstrated by the linguistic problem suggested above, as well as by other examples of role conflict and ambiguity cited in this as well as other studies of socialization for the professions.

Responses to Patient Inquiries

Most of the explanations given by students were in response to direct questions from the patients about what was going on. Usually, students would answer their patients' questions. Rarely did a student invite a patient to ask

about what was going on or to encourage the patient to discuss anything which he might not understand. This suggests that students assumed what was said to a patient was understood and that students were not anxious to have patients express their feelings, fears, or questions. Instructors did not encourage patients either, nor did they direct students to do so. The withholding of information, or, it is suggested here, the discouraging of requests for additional information, can serve to prevent the patient from exerting control over the treatment.[9] This explanation seems even more appropriate given the uncertainties of the student's role. Students would be even less assured about handling emotional outbursts than actual practitioners would and, in a situation in which their novice status is clearly evident, less confident about their control over the dentist-patient relationship.

One senior student, while treating his brother in operative dentistry, discussed changes in the treatment plan with an instructor, while the patient sat nearby in the dental chair, rubber dam in place over his mouth. The patient mumbled, after the instructor walked away, "What are you going to do?" The student then replied, "I'm going to take out the filling in front of it [the tooth they were treating] . . . I understand you hate your mother, or brother." Later, he urged the patient, "Come on, open. I'm not even gonna drill the tooth. Just going into the filling." Here, a belated "explanation" was used to induce patient cooperation.

Many of the explanations overheard were in response to

questions from patients about what the student was doing or what an instrument or machine was to be used for. Some questions indicated that the patient had not been informed about what was happening and, as implied in the quotations cited below, treatment plans appeared to change during the treatment, often without the patient's knowledge.

One junior, in the operative clinic, approached his patient with a second swab of topical anesthesia. The patient was startled and asked, "Oh, you're going to do the other side?" The student responded, "Yes. There's one on each side." It was apparent that the patient did not know what to expect or what was included in the treatment planned for that day.

Generally, patient questions appeared to have a low priority for students. One operative patient asked his student-dentist if the brown spots on his teeth were decay. The student said they were stains. Then, from underneath the rubber dam, the patient asked (with some difficulty) if the stains could be removed. He repeated the question three times. Finally, the student responded saying, "They'll come off when we polish your teeth."

Another student placed a pulp tester, a machine used to determine whether or not a tooth has a vital pulp, on his instrument cabinet. The patient asked what the machine was. The student ignored the question and walked away. When he returned, several minutes later, he explained what the machine was to the patient.

One student interrupted his detailed descriptions of instruments and procedures to explain to the obserserver that his patient, a teenage Spanish girl, was going to be a dentist. He quizzed the patient about what instruments were called. Another student was also heard quizzing his patient about the purpose of the instruments he was using. "Feel that? It's gotta be tight. Hang on. Remember the purpose of the wedge?" The patient said she didn't. The student replied, "You don't remember? I never told you?" The patient said he hadn't. Then he stopped to explain what he was doing.

Decision-Making

The treatment decisions observed in the operative and periodontics clinic were made by the students and the instructors alone, without any consultation with the patients. Often, the patients were not informed about changes in their established and accepted treatment plan.

In operative, an instructor came over as a student was completing a gold-foil restoration and suggested that he begin a second one. The student then proceeded to begin preparing the second tooth without any discussion with the patient.

The observer asked an operative patient what his student-dentist was doing. The patient said it was an inlay. Later, the instructor mentioned to the observer that the student was doing a "Class V gold-foil." The treatment plan had been changed to what the instructor described as an equally appropriate treatment, however, the patient seemed to be unaware of

the change.[10]

Students about to begin a procedure would have instructors come over to check the x-ray and diagnosis on the chart before allowing the student to begin. The instructor might suggest the student use a different procedure than the one the student had planned or that was indicated on the chart from the patient's original diagnosis. Sometimes instructors directed students to change the procedure after it was already begun. Some of these changes, it is inferred, reflect preferences of the instructors, the assessed ability of the student involved, or a change in the evaluation of the case itself as it progressed.

Students continuing treatment begun at a prior appointment were often careful to obtain approval from the same instructor they had used during that appointment for fear a new instructor would have them change the treatment plan. Some students were overheard telling their patients that they wanted to hurry and complete the restoration begun during the prior appointment before a new instructor came over and changed the treatment plan. These changes were not discussed with the patient or, usually, explained to him.

Discussions involving the choice of restorative material in operative dentistry were influenced by the student's preference, presumably based on what type of restoration he needed experience with or was comfortable doing. This is inferred from the content of the discussions where, if several types of fillings were equally suitable, the

student would advocate one, despite its having some feature suggesting it would be less appealing than others to the patient. This feature might have financial or aesthetic aspects, for example. In one instance, a student, speaking very rapidly, did ask the patient what type of filling he preferred for an anterior restoration.

Student: "Do you mind a little gold or silver showing in front of your teeth? Just a little. Or, would you like an asthetic restoration? The nice looking one . . ."

Patient: "No."

Student: "Which would you like? You have a cavity in the front. Just a little gold would show. They don't last as long. The gold lasts longer."

Patient: "The one that lasts."

Student: "I would prefer the one that lasts the longest."

Here it appeared as though the student had already selected the type of filling he preferred and needed to have the patient consent. Another student also discussed the next filling to be done with his patient.

Student: "The one in the canine is big. We'll put gold in."

Patient: "It will show!"

Student: "A little bit. A little gold showing is better than a big hole! I'll get somebody [an instructor] . . ."

In one instance, an instructor and student were heard

explaining the operative treatment and discussing the plan in detail with a patient. In this case, it was revealed that the patient was a friend of the student's. Here all of the advantages and disadvantages of the various alternatives were pointed out to the patient.

Another opportunity for patient involvement in the decision-making process involves the option to use anesthesia. This should be particularly true in operative dentistry, as opposed to oral surgery or periodontics, as in operative dentistry pain may be more of a variable factor. As pain itself is a subjective experience, it is ultimately the patient who judges what is painful or not painful for him. There are patients in oral surgery who manifest the objective signs of anesthesia who report experiencing what they interpret to be pain. For an operative patient, the injection itself may be experienced as more uncomfortable than the actual restorative procedure. Other patients, particularly the very anxious, may anticipate and experience a great deal of pain from a relatively minor procedure, even the very application of the rubber dam clamp. In the operative clinic, the decisions about whether or not to utilize anesthesia were made by the students and the instructors. The ultimate decision-making power rests with the instructor who rarely had any direct contact with the patient. The decision was often made after asking the student what type of procedure he was about to undertake.

Prevention and Post-Operative Instructions

Besides discussing facets of the patient's present treatment, students were expected to relate the patient's treatment to a more complete view of the patient's oral health, pattern of health care behavior, and means for preventing the further occurrence of dental and periodontal disease. Students were expressly expected to discuss concepts in preventive dentistry with their restorative clinic patients, to motivate those patients, and to reinforce concepts previously presented. Faculty displayed support for this norm in responses to the questionnaire items related to it. (Tables 26-27)

TABLE 26

FACULTY RESPONSE TO: "IT IS NOT EFFICIENT FOR STUDENTS TO DISCUSS ORAL HYGIENE AND PREVENTIVE MEASURES WITH RESTORATIVE CLINIC PATIENTS"

RESPONSE	PERCENT (N=173)
AGREE STRONGLY	2
AGREE	5
NEUTRAL	7
DISAGREE	35
DISAGREE STRONGLY	51

Over eighty-six percent of the faculty disagreed with the statement: "It is not efficient for students to discuss oral hygiene and preventive measures with restorative clinic patients." Over ninety-five percent agreed that "students should discuss oral hygiene and preventive measures with

TABLE 27

FACULTY RESPONSE TO: "STUDENTS SHOULD DISCUSS ORAL HYGIENE AND PREVENTIVE MEASURES WITH RESTORATIVE CLINIC PATIENTS"

RESPONSE	PERCENT (N=174)
AGREE STRONGLY	44
AGREE	52
NEUTRAL	3
DISAGREE	1
DISAGREE STRONGLY	0

restorative clinic patients." However, this support was not uniform when responses were stratified by department affiliation. (Table 28) While all respondents from the periodontics division disagreed with the statement: "It is not efficient for students to discuss oral hygiene and preventive measures with restorative clinic patients," over twenty percent of those from the operative department agreed with the statement. (Table 28)

Preventive dentistry is commonly associated with periodontic treatment making the results of the survey conform with those anticipated for a periodontics faculty. However, as the respondents are members of a dental school faculty, it is surprising that members of the operative and oral surgery faculties did not express stronger support for this norm.

Despite the strong general support from the faculty for this norm, preventive dentistry was discussed in less than six percent of the observations recorded. Further, all of these occurred during treatment in the periodontics clinic--

none were observed in operative or oral surgery. (Table 29)

TABLE 28

RESPONSE RATE OF OPERATIVE, ORAL SURGERY, AND PERIODONTICS INSTRUCTORS TO: "IT IS NOT EFFICIENT FOR STUDENTS TO DISCUSS ORAL HYGIENE AND PREVENTIVE MEASURES WITH RESTORATIVE CLINIC PATIENTS" (IN PERCENTAGE)

RESPONSE	OPERATIVE (N=14)	PERIODONTICS (N=23)	ORAL SURGERY (N=10)	TOTAL (N=47)
AGREE	21	0	10	9
DISAGREE	79	100	70	87
NEUTRAL	0	0	20	4

$X^2=26.6001$, $p<.001$

TABLE 29

PERCENTAGE OF OBSERVATIONS IN WHICH STUDENTS DISCUSSED PREVENTION BY CLINIC

PREVENTION	OPERATIVE (N=50)	PERIODONTICS (N=34)	ORAL SURGERY (N=41)	TOTAL (N=125)
DISCUSSED	0	21	0	6
NOT DISCUSSED	100	79	100	94

$X^2=19.07$, $p<.001$

It is interesting how little compliance with this norm was observed in the school clinic given the strength of commitment expressed by the faculty. Instructors did not initiate discussions with patients or students about the patients' preventive practices or problems in performing preventive

techniques. Students were not graded on their overall performance with an operative patient, but only on the mechanical aspects of the techniques they were called upon to perform.

Operative dentistry, by definition, consists of two components of patient care--the prevention of disease and the restoration of health. It is interesting then to note that, at first, it appears as though this first element, as it is commonly understood and defined by "preventive dentistry," is largely and conspicuously absent from operative treatment. However, it is pointed out that the procedures performed in operative dentistry, if completed well, serve to prevent the further onset of oral disease, both affecting tooth structure and periodontal tissues. Preventive dentistry for the operative dentist, then, is an intrinsic part of the operative treatment rather than the patient motivation, education, and hygiene and prophylaxis associated with periodontics and preventive dentistry. In operative, the model dentist-patient relationship involved in preventive procedures represents a dentist intervention model alone, or "activity-passivity" for the characteristic roles. In periodontics, the relationship involves cooperation and interaction.

The last norm considered in evaluating the behavior of students with regard to norms for humane care in the dentist-patient relationship in the operative dentistry clinic concerned the distribution of instructions for post-operative care. It seemed reasonable to assume that, following operative treatment, students would explain to patients what they

were to do to protect the restoration completed until it "set" or what to do in response to any possible symptoms experienced as a consequence of the treatment. Unlike in the oral surgery clinic, no printed sheets of instructions were available for this purpose. No instructors were heard discussing home care with patients in operative or encouraging students to see that patients understood what to do when they left the clinic, such as when they could eat.

Conversations between students and their patients about home-care were recorded in only two of the fifty observations completed in the operative clinic. In one, a junior student was heard providing a detailed explanation of how long it would take for the restorative material to harden. He pointed out to the patient that her mouth would be numb for awhile after leaving the clinic. Another operative patient returned to the clinic floor after being dismissed to ask her student-dentist how long she should wait before eating.

While, in operative, students do carry on a long term relationship with patients, their responsibility for the patient ends when the patient leaves the clinic. Patients cannot easily contact their student-dentists between appointments. Any problem or emergency they experience must be managed on their own, either through the services of a private dentist or emergency room. The same is true about the student's relationship with his periodontics patients. Only on four occasions were students heard giving patients instructions about what to do at home following treatment in the periodontics

clinic. It was noted that patients had difficulty understanding the vague instructions they were given. One student, for example, told his patient to rinse with warm salt water. The patient then asked how often he should rinse, how long, and why.

NOTES

[1]Patients come to the clinic for a variety of reasons which have been documented over the years. For specialty care, e.g. periodontics, surgery, endodontics, prosthetics and orthodontics, treatment is much less expensive than in private practice. Patients are also aware that they receive the care of some of the city's most reputed specialists in the school. Some assume that they will receive good care from Highbridge because of its reputation.

Some come to the clinic for companionship. This is especially true of the elderly. Many enjoy helping a student obtain his training. Only those with ample available time during the day, e.g. irregular jobs, students, housewives, the elderly, are able to attend. See Chapter V, pp. 91-93.

[2]The patient's ability to interpret any action of the student as in his own best interest is an example of a person'sability to construct reality as documented in an experiment by Harold Garfinkel. In this experiment, subjects, believing that they were involved in an experiment with a new method of psychotherapy, were able to interpret random "yes" and "no" responses as meaningful and relevant to what they had said, even when responses were contradictory. See Harold Garfinkel, Studies in Ethnomethodology (Englewood Cliffs: Prentice-Hall, Inc., 1967), pp. 76-103.

The patients' very positive image of the dental student has been expressed in several surveys of patient satisfaction with the clinic, including the most recent report presented to the faculty during the spring of 1975 by J.L. Essig (Shub) and D. Diserens, of the school's Office of Education and Behavioral Science. During the observations for the present study, most comments to the observer from the patients were unsolicited testimonials for their student's competence and concern for that patient.

[3]See Renee C. Fox, "Training for Uncertainty," in The Student-Physician, ed. by Robert K. Merton, George G. Reader, and Patricia L. Kendall (Cambridge, Massachusetts: Harvard University Press, 1957), p. 234.

[4]The use of words associated with violence with a patient could be upsetting to a patient, who is already in a helpless, anxiety-filled situation where the risk of mutilation is real. Patients whose fears of the dentist are associated with subconscious fears of mutilation, impotency or death, associated with the loss of teeth, would be especially

vulnerable to this type of vocabulary.

While patient reaction to the use of such words was not studied in detail, no obvious reactions were noted. Further, it would be difficult, using the present data, to ascribe motives of hostility or anything else to the students. It is suggested that a more detailed study of the linguistics would be interesting and fruitful.

[5]Peter Berger and Thomas Luckman, The Social Construction of Reality (Garden City, New York: Doubleday & Company, Inc., 1966). See also, Talcott Parsons, The Social System, paperback edition, (New York: The Free Press, 1951), Chapter X, pp. 451-453.

[6]For an alternative account of health-related behavior, see Horace Miner, "Body Ritual Among the Nacirema," American Anthropologist, 58 (1956).

[7]Joan P. Emerson, "Behavior in Private Places: Sustaining Definitions of Reality in Gynecological Examinations," in Recent Sociology, ed. by Hans Peter Dreitzel (No. 2; New York: The Macmillan Company, 1970), p. 73.

[8]A function of the development of what has been termed "detached concern" in the socialization process, see Merton, et al., The Student-Physician, may be to help maintain the medical definition of reality. The use of uniforms and the construction of the physical setting of the clinic may also function to sustain the constructed definition of the situation commonly subsumed under the rubric of "professionalism."

[9]Eliot Freidson, Profession of Medicine (New York: Dodd, Mead & Company, Inc., 1970), pp. 314-315.

[10]Both the inlay and the gold-foil restorations are formed from gold. The inlay is a precast gold restoration which is cemented into the prepared cavity. A foil is a restoration of malleable gold which is hammered and formed directly in the prepared cavity.

PART III

CONCLUSIONS

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This study demonstrates that the social organization of the dental school has an important influence on the behavior of dental students in their relationships with patients in the school clinics. Evidence from a later study of student attitudes, comparing student perceptions of the importance of "technical" and "interpersonal" skills before and after the change in the clinical teaching format,[1] supports this conclusion. In that study, the students' perceptions of the importance of interpersonal skills in clinical dentistry increased following their experience when the clinic's organization was altered to emphasize comprehensive patient care. Student perceptions of the importance of technical skills, which were high before the change, remained high as well. Student behavior and student-faculty relations have not been evaluated since the change from the departmentalized clinic format.

Generally, student behavior should reflect norms prevalent in the dental school setting. A number of factors influence the likelihood of compliance with any set of norms for any given situation and for any set of roles. Here, the role of the dental student is described as a dynamic set of relationships which occurs in a setting likely to produce

sociological ambivalence. This ambivalence arises from a variety of sources, including: the student's own insecurity in his role, the expectations of faculty members and patients, and the complex values and goals of the institution itself.

In prior chapters, the social milieu in which the dental student-patient interaction occurs is described in detail. The student's experience in this milieu contributes to the shaping of his behavior with patients through its effect on the student's perceptions of the social reality in which he acts. The norms for student behavior identified by instructors in the dental school are compared with those observed to be operating in various clinical settings. The goals, values, and norms of each of three clinical departments are reflected by student behavior with patients receiving treatment in these three clinics. This comprehensive analysis of the social structure of the training environment demonstrates how the dental student defines the situation he is in with regard to the patient in the school clinic, and how he formulates his role in that relationship. Clearly, fixed conceptions of the practitioner's role contribute little to an understanding of student's behavior as they fail to account for the effect of social structure on individual action.

This is the first study to utilize observations of dental student behavior in situ. Consistent with the theoretical perspective of symbolic interactionism, student behavior is analyzed in the context of the relationships and other facets of the social milieu in which it occurs. These

findings emphasize the usefulness of a comprehensive investigation of student norms for understanding professional behavior.

In summary, the following characteristics were observed in the dental school's clinics:

1. The routinization of treatment procedures
2. The presentation of a rational objective account for these procedures
3. The application of various treatment modalities and procedures on the basis of conditions external to the individual patient or the patient-practitioner relationship
4. The exclusion of the patient from the decision-making process
5. The withholding of information from patients
6. An emphasis on mechanical-technical rather than scientific or ethical elements of patient care
7. The obscuring of the manifest or intended functions of procedures and treatment objectives.

One result of these conditions has been a depersonalization of the patient through an obscuring of the patient role in the treatment setting. This has had the effect of de-emphasizing the relevance of norms related to a one-to-one relationship and the provision of humane treatment.

This general finding supports the conceptualizations of the patient-practitioner relationship of Freidson and Mechanic. Most appropriate to describing such relations are

the theories of symbolic interaction and conflict theory. Less appropriate are theories which cite the meaning of action in a rational account of the manifest function of the action.

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[1]See Chapter IV, p. 71; and J. Essig (Shub), D. Diserens, and S. Wotman, "Evaluation of the Effects of a New Program of Clinical Teaching on Students' Attitudes" (paper presented at the 53rd annual session of the American Association of Dental Schools, Miami Beach, Florida, March, 1976).

CHAPTER X

THE INFLUENCE OF SOCIAL STRUCTURE ON DENTAL SCHOOL NORMS

The question central to the present study is: How can the behavior of the dental student vis-à-vis patients be explained? The behavior of students in the Highbridge dental school clinic has been compared with specific norms for behavior in the dentist-patient relationship. It is concluded that the norms prevailing in the school clinic conflict with a set of norms for the dentist's role which these same students and their mentors claim prevail in the school.

The norms observed are regarded as a product of the organization and structure of the dental school as a training institution. The question of why ostensibly conflicting norm systems exist remains. An analysis of the training environment and the attitudes and actions of the dental faculty suggests that the critical variables for answering this question are the structure of the dental school clinic and the perspectives of the instructors in this environment.

Through the use of a questionnaire survey of the dental school faculty, a set of norms for student behavior with patients in the clinic was established. A similar survey of two junior and senior classes at this same dental school demonstrated that these students are aware of the faculty's

expectations for their behavior. However, while the responses to the student surveys indicate student acceptance of these norms, the students' perceptions of the faculty's commitment is significantly less than their own and less than actual faculty commitment, as reflected in the faculty's own responses.

Earlier studies of dental student attitudes fail to correlate attitudes with behavior. Further, student attitudes have generally been regarded as a product of the professional students' personalities. Thus, the role of the social structure of the training setting in influencing student behavior is ignored.

To test the hypothesis that social structure is the significant variable determining student behavior, students were observed with their patients in three clinical specialties. Thus, the degree of conformity with established norms could be compared not only between classes, but in different environments as well. Not only did the behavior observed vary from that said to be expected in the survey results, but significant and provocative differences were observed in the norms prevailing in each of the three clinics studied.

The fact that the behavior observed conflicts with one set of norms accepted by both students and faculty members for the dentist's role supports the contention that students and faculty members do not perceive themselves to be assuming the role of dentist in their relationships in the school clinic.[1] It is observed that instructors often do not

respond to clinic patients as patients but behave as though they regard them only as learning resources for students. In the clinic, faculty members perceive their role as that of "instructor" rather than "dentist." Most of the time, instructors interact only with their students. The patients are ignored. Students are treated as subordinates rather than as colleagues cooperating in providing patient care. While, ultimately, legally responsible for the care the clinic patients receive, faculty members do not generally enter into what would be described as a "doctor-patient" relationship with the clinic patients but maintain a supervisory role. This is particularly true in the operative dentistry clinic where faculty members were least directly involved in the treatment process. It may be as a consequence that the least support for and compliance with a set of norms for the dentist-patient relationship was observed in the operative clinic. A review of the history of the dental profession and the social structure of the dental school contribute to an understanding of how the roles of dental students and dental instructors in this dental school developed as they have.

Origins: The Development of Dentistry as a Profession

A basis for understanding what the symbolic meaning of the norms for the patient-practitioner relationship in the dental school clinic represent in more general terms emerges from a reconsideration of their historical origins.

Values which were originally a part of early dentistry remain embedded in the emergent profession. As a result, it

appears as though a struggle over the character of the profession continues. This struggle is reflected in the existence of disparate norms and practices in the school operative and oral surgery clinics at Highbridge.

Two elements were merged together in the early part of the twentieth century to form modern dentistry as a profession. The first is the mechanical-technical element which had made up the entire identity of American dental practice until that time. American dentistry was most committed to technique alone and was reluctant to view dental conditions as the consequences of disease processes.[2] As important a component of dental treatment as it is, technique cannot stand alone as the only, or foremost, element of dentistry as oral health is so integral a part of an individual's general physical health and psychological well-being.

A second element emerged as a consequence of critical pressures on the profession to change. This second element, the professional element, consists of the ethical values and norms and the scientific component fundamental to developing a legitimate body of knowledge generally associated with a profession. When, in dental education, this second element was introduced and merged with the first, it did not immediately change the character, or the self-image, of dentistry. Mechanical techniques remain an important element of dental practice along with the diagnostic and other skills which were brought into the dentist's role. Dentists developed a sort of split image--mechanic and physician. It is not difficult

to understand how tension between these two roles can exist. Each aspect of the dentist's role, to varying degrees, attracts the interests of different members of the profession.

A struggle over which element will have the strongest influence in determining the professional role continues. This struggle is evident in the stances taken by dentists regarding issues current in the profession. Those attracted to the first element discourage the profession from relinquishing control over the performance of mechanical dental techniques. They thwart the introduction and advancement of more scientific and medically oriented techniques and theories, such as advanced surgical, pharmacologic, or psychological techniques, and preventive dentistry as well. From their ranks comes rejection of fluoridation programs, hypertension screening, and other programs reflecting a sense of social responsibility. They reject the delegation of mechanical procedures to expanded duty auxiliaries and technicians which would limit the dentist's role to diagnosis, supervision, and the performance of more technically advanced procedures--similar to the role of the physician today.

Two ideal-type dentists can be described. One is a mechanic. This type does not see the relevance of the basic science, preventive, or psychological training provided in dental education.[3] Technique is important. Technique is dentistry. It is possible to construct a "textbook perfect" restoration. The operation is a success even if the patient, symbolically, dies. Teeth are not regarded as living tissue.

It makes no difference if they are repaired in a real mouth or in a mannequin jaw--there can be no consequences for a patient's health in any event. Much like the American dentist at the turn of the century, he ignores the possible concomitants of his work.

The second type sees the dentist's role as that of a physician. He views the patient's oral cavity in its entirety and in its relations to the entire body as well.

The extremes of these two orientations are visible in the contrasting approaches to patient care in the Highbridge clinics. There, the oral surgery instructor, like a physician, anticipates pain, bleeding, and infection. The clinic setting is designed to minimize the occurrence and severity of such complications. Sterile instruments, anesthesia, and emergency apparatus and medications are readily available. Following treatment, patients must be given instructions for home care. In contrast, the operative instructor, like a mechanic repairing an inanimate object, pays little attention to possible complications and patient comfort. The role of anesthesia in treatment and the importance of instructing patients in home care is minimized.

The student's experiences in these diverse settings influence what he learns in dental school about patient care.

Socialization Processes in the Dental School

The socialization process of the dental student has direct bearing on the ways he interacts with patients. It appears that, contrary to expressed objectives, this process

provides the student with training in an inhumane or insensitive approach to patients as people. The student receives his clinical training through a simulated treatment experience where actual patients expect to receive adequate dental care. In this setting, however, as in the preclinical training the student receives in dental technique, the interpersonal and psychosocial aspects of patient care tend to be de-emphasized or ignored.

It may be that the depersonalization of the patient observed in the operative clinic, for example, is a necessary condition of the rational procedures associated with valid techniques for effective operative treatment. Closer consideration suggests that this is not so. It is, after all, possible to perform such treatment in a humane way as it is in many, if not most, dental offices. However, it simply may not be possible to teach students to carry out these procedures while being sensitive and responsive to patients. This also seems doubtful. Practice in operative dentistry is provided in pedodontic and T.E.A.M. training where, while the emphasis is theoretically on "patient care and management"--the interpersonal elements--students do receive effective training in technique as well. It has been observed that, while dental hygiene students receive technically oriented training in a clinical setting, they seem better able to maintain a more humanistic approach to their assigned patients.

The observation data demonstrate that the insensitive treatment the clinic patient receives in some clinics is not

a "product" of the personalities of the dental students. Those students observed treating patients in an insensitive manner, or violating a norm for the dentist-patient relationship, in one clinic, are observed conforming to norms for sensitive care with their patients in other clinical settings. Some students, particularly in the operative clinic, expressed frustration over their inability to respond to patients as they do in other clinics.

One possible account for professional students' insensitivity to patients is that they are engaged in trying to develop appropriate detachment from their patients. However, the process of developing appropriate detachment does not preclude attending to the patient's comprehensive care needs. Further, this study indicates that the insensitivity noted does not result from factors intrinsic to the characteristic modalities of dental treatment.

The student realizes that, in order to graduate, he must successfully complete his clinical requirements. Grading in the clinical specialties, he also quickly learns, is based on subjective evaluations of his performance. Standards vary from instructor to instructor. What is acceptable or preferred in one clinical specialty is forbidden in another. A student concerned with the welfare of a patient can easily come into conflict with an instructor. Such situations were noted with regard to the use of anesthesia for operative patients. The social structure of the training environment appears to play a central role in determining the norms for patient care

acquired during dental training.

A dentist, engaged in specialty practice, teaching, and research, wrote:

> In my poor opinion it is a person's dignity that suffers the most severe damage during dental school. It is avoidance of damaging incidents that eventually dictate a student's performance. These were the impressions I obtained while taping evening bull sessions in my living room during the 60's. I would invite students over, four at a time, to tell me what they thought was wrong (or right) about dental school . . . I've never seen a more resentful, discouraged, angry, bunch. I don't see any signs that things are getting better, either. First of all the selection process dictates that we accept a group the majority of which has already sold a share of its humanity to qualify for the freshman class. Then we foster their unchecked ambition by setting up conditions that pay for technical excellence and anonymity rather than integrity and humanitarianism. All of this means that they can continue to concentrate on grades and other artificial measures of success and ignore what should be the goal of every dental school exercise, improvement in the quality of somebody else's life . . . [italics mine][4]

Social Structure and the Dental Student-Patient Relationship

Dental education exposes the dental student to both the interpersonal and technical aspects of the practice of dentistry. During this period, the student interacts with members of the profession serving as faculty members and role models. In the course of his clinical training, he will be responsible, incidentally, for treating patients. He will be expressly responsible only for mastering various mechanical techniques. To do so, he will be exposed to a variety of practice situations ranging from carving pieces of chalk and wax to practicing techniques on extracted teeth in mannequin jaws. Lastly, he must demonstrate proficiency in these techniques in the mouths of actual patients.

A broader view of the dentist's role is presented through various lectures and courses, including community dentistry, preventive dentistry, human behavior, and the medical school basic science curriculum. However, the student is expressly responsible for demonstrating his mastery of the mechanical-technical skills of dental procedure not for his ability to treat patients, make judgments and diagnoses, demonstrate ethics or intellectual or scientific curiosity and growth.

As a consequence of this emphasis, the patient is depersonalized and turned into an object. The patients themselves are screened. They are given the "rules" they must follow if they wish to remain as patients. Symbolically, these rules serve to change the patient's role from patient to mannequin. Patient behavior has been described in previous chapters as generally overly compliant. The patient's behavior does not make it necessary for students to learn to deal with behavior in order to practice restorative techniques. As in the historical development of the profession, in dental education, technique, as the core of dentistry, exists in opposition to the scientific and interpersonal aspects of the profession.

The goals of the student's training are graduation, passing regional board examinations for licensure and then entrance to either graduate training or practice. In order to attain these goals, students must acquire proficiency in the dental techniques these goals require. Dental school

grades are based solely on the evaluation of restorative procedures completed rather than the overall successful treatment of a patient. Thus, there is no formal evaluation of the student's compliance with accepted norms for humane or comprehensive care.[5]

Another example of the instrumental role of the patient is illustrated by the variables involved in the selection of alternative treatment plans. Student requirements and examinations play a role in determining the treatment selected for patients in the operative clinic. Practice board examinations are conducted periodically in the operative clinic. Prior to such examinations, students search for patients with pathologies appropriate for the examinations. In selecting from alternative treatment plans for a patient, a student is likely to choose, or convince his patient to accept, one which will allow the student to practice a technique tested on the board examinations. At such examinations, as in the clinic, patients are expected to sit in the dental chair for several hours, or all day, and accept the treatment being provided. The student's acceptability is based on an assessment of what he has done to a tooth rather than the way he has treated a patient. Some students pay their board patients for attending the exams. At the examinations, the board examiners by and large appear to disregard the patient's presence, as do the school instructors. To successfully graduate, be certified by the dental school to take the board examinations, or to be accepted into graduate training, the student must

conform to the norms and "style" of the instructors to attain adequate grades--all based predominantly on demonstrated technical ability. No systematic evaluation is made of the students' overall professional ability beyond this one aspect of dental treatment.

The emphasis on the needs of the student over the patient is further illustrated by the way treatment is planned and scheduled. A patient requiring several types of treatment is assigned to a student in each of the appropriate clinics as openings for patients become available. The patient receives the treatment the students are required to perform when the students need to practice. If, for example, a patient requires some operative treatment which is more complicated than the student he has been assigned to can perform, the student will be instructed to go ahead and complete the simpler treatments the patient requires. This occurs regardless of whether or not postponing treatment will adversely affect the patient. Given the fact that treatment may drag on for months or even years, patients have required endodontic treatment and other more advanced procedures as a consequence of having had treatment postponed.

Dental students, like the medical students studied by Becker, describe their desire to maintain anonymity and "get by." This fact seems at first incongruous, particularly for the students at Highbridge where the size of an entire dental school class ranges between 35 and 45 students.[6] Given the subsequently small instructor to student ratio, one would

expect a close, collegial relationship to ensue. However, dental students, by and large, do not wish faculty members to be aware of who they are. None wish to be known for trying to raise issues or change the status quo, fearing that their visibility will have an adverse effect on the way they are graded in technique by their instructors. Their perceptions have, on occasion, been validated. Students will tend to show their work to instructors they believe think well of them, finding that such instructors are likely to assign better evaluations regardless of the merits of the performance. After graduation, the students are free to practice dentistry as they like. The professional student must defer a great many rewards until after graduation.

Since the actual techniques students are taught have little significance in themselves in determining student behavior, the symbolic meaning of these techniques is considered a critical element in the social structure of the clinics.

Latent Functions of Clinic Routines

The techniques observed were described from the perspective of their objective function in the delivery of dental treatment. Little attention has been given to their symbolic importance. Some latent functions of various rationally valid procedures have been cited. Some of these procedures, which can be rationally accounted for in a treatment schedule, appear to inhibit the communication of humane norms to students. This is seen to be a result of the way in which these procedures are employed in particular clinical settings, as demon-

strated through a comparison of the ways in which similar procedures are managed in different clinics. Comparisons of procedures employed in several clinics indicate that these procedures are not dehumanizing or inhumane as a consequence of features inherent to the procedures themselves. When procedures become imbued with symbolic meanings that relate to the relationship between the student and the instructor, this is when their implications for patient care may be adverse.

An important example of this is the differences observed in the ways anesthesia is prescribed for clinic patients. Anesthesia is used, theoretically, to make dental treatment more comfortable for the patient. Since a comfortable, relaxed patient is easier to treat, the use of anesthesia has benefits for the practitioner beyond those derived from performing a humanitarian act. Students learn, through their experiences in the periodontics and oral surgery clinics, that anesthesia should be provided for dental patients undergoing surgical procedures. In operative dentistry, however, local anesthesia is not utilized routinely nor is it regarded as a means for aiding the practitioner. In the operative clinic the use of anesthesia inhibits the student's progress and can be described as an obstacle to the efficient completion of an operative procedure.

At Highbridge, since the decision to use local anesthesia for operative treatment is equivocal, it becomes the responsibility of the operative faculty to authorize its use. This responsibility is then used as a means for maintaining the status differences between the students and the faculty.

In the process, the welfare of the patient is lost sight of. Pain control itself is a major objective of any dental treatment. In comparing the operative and oral surgery clinics, however, it appears as though the manifest objective of the use of anesthesia, the patient's comfort, is obscured. The faculty in the operative clinic have been given the right to authorize the use of anesthesia and do so on a student by student basis. The decision does not involve a patient-practitioner interaction, as it would ideally in practice, but a student-instructor interaction or confrontation. Students, having obtained permission to use anesthesia from an instructor, must then have an instructor supervise the administration of the injection. This is required despite the fact that students administer anesthesia without this same close scrutiny in other clinics within the school. To avoid possible degrading or time-consuming confrontations with their operative instructors, some students avoid the use of anesthesia as much as possible, sacrificing their patients' comfort for their own. It is incumbent upon the student to maintain a definition of the social reality with his patients that assures the patient that he is indeed a <u>patient</u>, in a treatment setting, and that the student is indeed his "doctor."[7] This is necessary to assure even the most minimal amount of cooperation from patients. Maintaining this definition can be particularly difficult for a student, given their own ambivalence about their role in the school clinic.[8] The student's relationship with a patient, in which the student must attempt

to sustain the definition of his own role as that of "doctor," is easily jeopardized by encounters with faculty members. This is particularly true if the student loses in the encounter[9] or must otherwise assume a subordinate role in front of his patient.[10]

In contrast, the oral surgery division is expressly responsible for training students in the use of anesthesia. It is the only department with clinical facilities for the use of the inhalation and intravenous sedation and anesthetics. There is a strong implication that both the patient's experience of pain and the prevention of that experience by the dentist are legitimate in the surgical setting. While this implication is conveyed through the practices of instructors in the oral surgery and periodontics clinics, it appears to be absent from the operative clinic, where, while tissue is surgically manipulated, that tissue is the "dead" tissue of teeth. The pulp, the living area of the tooth, is defined as "out-of-bounds" by the operative instructor. Therefore, no provision is made in the clinic for the eventuality that this portion of the tooth will be invaded. The operative faculty regards a pulpal exposure as a serious failure. Operative instructors have claimed that, by not using anesthesia, the student will work more carefully and be more aware of how deeply he is penetrating the tooth structure. Rather than as an aid to patient comfort, the student's desire to use anesthesia is perceived as a sign of weakness.

Some Speculation About Becoming a Dentist

How lasting are the effects of dental school and the socialization differences in the various clinics? To what extent are the students molded by these experiences for their future role? If, while in dental school, the dental student does not acquire the norms prevailing in the profession of which he will become a member, how will he behave with patients when he actually becomes a dentist?

These are not easy questions to answer. Studies of the dentist-patient relationship which examine the social context of such relationships are needed. Given the premises of this study, especially that:

- -A variety of variables influence behavior, particularly the social structure in which it takes place; and,
- -How an individual defines the situation he is in will determine the norms selected as appropriate for the interaction;

the social setting of the type of practice situation the new dentist enters can be expected to have a strong influence on his behavior with patients.

The dentist's relationship with his patients is in a number of ways very different from that between the student and patient. A patient can be less tolerant of insensitive treatment in private practice. The patient does not view the practitioner as a "student," expecting him to be inept and responsive to the rules of a clinic or instructor. The dentist is dependent on having the patient pay his bills and return for treatment so that he can be successful in his practice. He is dependent upon having that patient refer

other patients to him as well. As one instructor pointed out, the patient is unable to evaluate the dentist's technical skills. His impression of how "good" the dentist is is based on whether or not he likes the way the dentist has treated him. Unlike in the school clinic, then, it appears as though the practicing dentist is no longer evaluated on technique alone but must display expertise in the interpersonal aspects of patient care.[11]

The need for competence in interpersonal skills and psychosocial aspects of dental treatment is evident in the existence of continuing education courses in interpersonal skills, communication, and patient management offered along with courses in aspects of dental technique. A psychologist previously employed by the American Association of Dental Schools has now established a corporation which provides private consultation services for practitioners in addition to scheduling seminars on interpersonal relations. A growing number of dentists with Ph.D.'s in psychology are joining dental faculties as another indicator of the importance of such skills.

Evidence about the relationship between medical education and professional practice suggests that, despite the emphasis given the technical skills of dental practice at Highbridge, how great the practitioner's emphasis on technical quality will be is problematic. Peterson's study of general practitioners in North Carolina indicates that the most obvious effect of medical education, the acquisition of knowledge

may not be lasting.[12] In Peterson's study, the relationship between the physician's class rank in medical school and the quality of his practice, as indicated by the extensiveness of the examinations performed, was small. Becker, Geer, and Miller suggest that

> what one learns in school, then, may not be as important as the conditions under which one practices afterward: If patients and colleagues do not expect a doctor to maintain a high level of medical knowledge, he may quickly lose it.[13]

A number of practitioners ask to participate in the Human Behavior Course at Highbridge. Their reason for wanting to teach in this particular course is that they believe it is the most important course offered in the dental school. They report that, once they began to practice dentistry, they realized that their interpersonal skills were the most important techniques they had for providing patient care.

It is very clear from the results of this study that such courses in the dental school curriculum can do very little in themselves to affect the relationships between students and patients in the school clinics so long as the other aspects of the social structure of the Highbridge training setting, including the relationships between instructors and students, remain the same. In fact, the existence of the Human Behavior seminar at Highbridge as part of the preclinical curriculum has increased student frustration and ambivalence when confronted with the norms for patient care prevailing in the clinics.

The findings have direct implications both for the

organization and structuring of dental education and the conduct of sociological research.

Conclusion

Hamlet: Denmark's a prison.

Rosencrantz: Then is the world one.

Hamlet: A goodly one; in which there are many confines, wards, and dungeons, Denmark being one o' the worst.

Rosencrantz: We think not so, my lord.

Hamlet: Why, then 'tis none to you, for there is nothing either good or bad but thinking makes it so. To me it is a prison.

Shakespeare Hamlet II.ii.260-267.

The conclusion of this investigation is that it is the structure of social institutions which guides the ongoing day-to-day interactions between individuals and, specifically, between dental students and their patients in the Highbridge Dental School clinics. As symbolized by Hamlet's perception of himself as a prisoner of Denmark, actors remain captives of the institutions in which they interact. Thus, the dental students' behavior can be seen as a product of the social structure of the dental school.

In his play, Rosencrantz and Guildenstern are Dead, Stoppard presents two interchangeable characters.[14] As the play progresses, it no longer matters which character is Rosencrantz and which is Guildenstern. In fact, the characters themselves forget which is which. In the end, they, like Hamlet, see that the course of events is beyond their control. The die is cast and they must fulfill their roles.

This account of the social structure of the dental school clinics illustrates that it is unimportant to know who the students attending Highbridge are to know how they will behave with their clinic patients. It is more important to understand the social organization of the clinic itself.

NOTES

[1]See D. Diserens, J. Essig, and S. Wotman, "Professional Role Development and Perceived Faculty-Student Relations" (paper presented at the 54th general session of the International Association for Dental Research, Miami Beach, Florida, March, 1976), and Mary Jean Huntington, "The Development of a Professional Self-Image," in The Student-Physician, ed. by Robert K. Merton, et al. (Cambridge, Mass.: Harvard University Press, 1957), pp. 179-187.

Data from the Diserens, Essig, and Wotman study of junior and senior dental students at Highbridge in the spring of 1975 indicate the following:

STUDENT SELF-PERCENTION		STUDENT EVALUATION OF FACULTY PERCEPTION OF STUDENTS	
Primarily Dentist	21%	Primarily Dentist	25%
Primarily Student	79%	Primarily Student	75%

Data is based on a 73% return of questionnaires from 31 juniors and 35 seniors. (N=66)

[2]See Chapter I, pp. 5-8.

[3]The editorials written by Dr. Herbert Butts, including those in the May 1975 and May 1977 issues, in the Journal of the American Dental Association have come out for reductions in basic science, behavioral science, and preventive dentistry instruction in dental education and increased training in dental technique.

[4]Excerpt from personal communication, April, 1977.

[5]The director of the dental school clinics was frustrated over his inability to deal with a student who was continually involved in conflicts with his instructors and his patients. As he reported, his problem was that since the student was formerly a dental laboratory technician, he was given very good grades in his technique courses and, therefore, could not be dropped from the school.

[6]The following data is from the study cited above by Diserens, Essig, and Wotman:
When the students in this study were asked how many faculty members they believe know them by name, the response rate was as follows: (N=66)

About 10 or less:	45%
About 20-25:	32%
More than 25:	23%

[7]See Chapter IX, pp. 207-208.

[8]See Chapter VII, pp. 167-170.

[9]For a discussion of the relevance of "game theory" for such face-to-face encounters, see Stanford M. Lyman and Marvin B. Scott, A Sociology of the Absurd, Meredith corporation (New York: Appleton-Century-Crofts, 1970), especially pp. 34-35; 36-40; and 54-58.

[10]For other instances of "face-work," see Goffman's seminal essay, "On Face-Work," in Erving Goffman, Interaction Ritual: Essays on Face-To-Face Behavior, Anchor Books (Garden City, New York: Doubleday and Company, Inc., 1967), pp. 5-45.

[11]Similar observations about the ways patients evaluate physicians are presented by Mechanic. See David Mechanic, Medical Sociology (New York: The Free Press, 1968), pp. 158-166.

[12]Osler L. Peterson, et al., "An Analytical Study of North Carolina General Practice: 1953-54," Journal of Medical Education, 31, Part II (December, 1956).

[13]Howard S. Becker, Blanche Geer, and Stephan J. Miller, "Medical Education," in Handbook of Medical Sociology, ed. by Howard E. Freeman, Sol Levine, and Leo G. Reeder. Second Edition. (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1972), p. 193.

[14]Tom Stoppard, Rosencrantz and Guildenstern are Dead (New York: Grove Press, Inc., 1967).

[15]Ibid.

APPENDIX I

CLINICAL DENTAL SPECIALTIES

The clinical specialties represented by divisions in the dental school include: endodontics, pedodontics, periodontics, prosthodontics, operative dentistry, oral surgery and orthodontics. As each has been referred to in the text, a brief explanation of each follows:

1. Endodontics

Endodontics is that branch of dentistry which deals with the diagnosis and treatment of diseases of the pulp and periapical tissues compatible with good health. Its scope encompasses those disturbances or diseases of the pulp requiring pulp capping, pulpotomy, or pulp extirpation; treatment and filling of infected root canals by conservative means; surgical removal of pathologic periapical tissue when indicated; restoration of the natural appearance of the crown when discolored; replantation of teeth when avulsed or luxated; intentional replantation of teeth; transplantation of teeth; hemisection or radisectomy; and endodontic implants.[1]

2. Pedodontics

Pedodontics is that branch of dentistry which deals with juvenile patients and the oral diseases and manifestations, growth and development and behavioral characteristics, of

such patients.

3. Periodontics

The branch of dentistry concerned with the study of the normal tissues and the treatment of abnormal conditions of the tissues immediately about the teeth. (Periodontium: The tissues which surround, support and are attached to the teeth. These are the gingivae, cementum, periodontal membrane, and alveolar bone.[2]

4. Prosthetics

The branch of dentistry concerned with the production and adjustment of prostheses to replace missing teeth.

5. Operative Dentistry

Operative dentistry can be defined as the prevention and treatment of defects in the enamel and dentin of individual teeth.[3]

6. Oral Surgery

Oral surgery is that part of dental practice which deals with the diagnosis, the surgical and adjunctive treatment of the diseases, injuries and defects of the human jaws and associated structures.[4]

7. Orthodontics

Orthodontics includes the study of growth and development of the jaws and face particularly, and the body generally, as influencing the position of the teeth; the study of action and reaction of internal and external influences on the

development, and the prevention and correction of arrested and perverted development.[5]

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[1]Louis I. Grossman, Endodontic Practice (7th ed.; Philadelphia: Lea and Febiger, 1970), p. vi.

[2]"Periodontics," Stedman's Medical Dictionary, 21st ed., 1966, p. 1205.

[3]H. William Gilmore, Textbook of Operative Dentistry (Saint Louis: The C.V. Mosby Company, 1967), p. 1.

[4]Gustav O. Kruger, Textbook of Oral Surgery (3rd ed.; Saint Louis: The C.V. Mosby Company, 1968), p. 1.

[5]T.M. Graber, Orthodontics: Principles and Practice (2nd ed.; Philadelphia: W.B. Saunders Company, 1966), p.11.

APPENDIX II

FACULTY QUESTIONNAIRE

Expectations for Dental Student Behavior in Clinical Settings

Faculty members in different schools, and even within each school, differ in regard to the importance which they attach to various aspects of dental students' interactions with patients. Please indicate how much you agree with each of the following statements by placing a check in the appropriate square in the grid at right. Use the following scale:

AGREE STRONGLY; AGREE; NEITHER AGREE NOR DISAGREE; DISAGREE; DISAGREE STRONGLY;

	AGREE STRONGLY	AGREE	NEITHER AGREE NOR DISAGREE	DISAGREE	DISAGREE STRONGLY
1. It is not efficient for students to discuss oral hygiene and preventive measures with restorative clinic patients.					
2. If necessary, students should sacrifice rapport to complete clinical procedures.					
3. Students should provide patients with a general understanding of the procedures and treatment.					
4. It is the student's responsibility to work with even very uncooperative patients in order to develop interpersonal skills.					

	AGREE STRONGLY	AGREE	NEITHER AGREE NOR DISAGREE	DISAGREE	DISAGREE STRONGLY
5. Developing techniques for effective student-patient relationships is as important a part of the student's dental education as the acquisition of clinical skills.					
6. It is better for a student to finish his work than spend time attending to indications of patient anxiety.					
7. Rapport with patients is a necessary ingredient of effective dental treatment.					
8. It is better for students not to tell patients what they may experience as an after effect of the treatment.					
9. The dental student should deal with patient feelings at the outset of their relationship by beginning to work promptly and efficiently, thereby establishing patient trust.					

	AGREE STRONGLY	AGREE	NEITHER AGREE NOR DISAGREE	DISAGREE	DISAGREE STRONGLY
10. Rather than discuss what he will be doing with the patient, the student should proceed directly with the treatment.					
11. Developing techniques for effective student-patient relationships is not as important in the clinic as is the acquisition of clinical expertise.					
12. It is the student's responsibility to recognize and respond to signs of patient anxiety, e.g., body movements, perspiration, sounds, in order to help reduce patient apprehension.					
13. Chairside manner, such as remembering to call the patient by name, is of little importance in the clinic while the student is still learning his technical skills.					
14. A student is right to refuse to work with a patient he finds uncooperative.					

	AGREE STRONGLY	AGREE	NEITHER AGREE NOR DISAGREE	DISAGREE	DISAGREE STRONGLY
15. Students should discuss oral hygiene and preventive measures with restorative clinic patients.					
16. Students should tell patients what to expect "after the anesthesia wears off," and about any instructions for home care.					
17. The dental student should deal with patient feelings at the outset of their relationship thereby establishing rapport and patient trust, before beginning the planned clinical procedure.					
18. The student should proceed clinically when all objective signs of anesthesia are present, even ifthe patient professes pain.					
19. Students should address clinic patients by name.					
20. The student should make use of his human relations skills in the management of pain.					

21. There is entirely too much emphasis on psychological and social aspects of patient care in dental education.

AGREE STRONGLY	AGREE	NEITHER AGREE NOR DISAGREE	DISAGREE	DISAGREE STRONGLY

APPENDIX III

CODEBOOK

INDEX CARDS FOR OBSERVATION RECORD

COLOR OF CARD: Operative Dentistry = Yellow
Periodontics = Orange
Oral Surgery = Blue

1. Student I.D. Number (Three digits, first indicates class)

2. Student's Sex: 1=male 2=female

3. Student's Race: 1=white 2=black 3=oriental

4. Date of Observation:

5. Time of Observation: 1=morning 2=afternoon

6. Patient Information:

   a. Sex: 1=male 2=female
   b. Age: 1=12 yrs. or younger 2=teenager 3=young adult 4=middle-aged 5=elderly
   c. Race: 1=white 2=black 3=oriental 4=spanish

7. Visit to the Clinic: 1=first 2=subsequent visit

8. Instructor's Name:

9. Instructor Present: 1=no 2=yes

10. Procedure:

11. Number of Observation for Particular Student:

APPENDIX IV

COVER LETTER FOR FACULTY QUESTIONNAIRE

HIGHBRIDGE SCHOOL OF DENTISTRY
INTERDEPARTMENTAL MEMORANDUM

DATE January 4, 1974

TO Colleagues

SUBJECT Research on Expectations for Student Behavior

As you may have heard, our office has undertaken a study of student behavior in the dental school clinic. The research is being conducted by Ms. Judith Essig (Shub), of the Human Behavior faculty. In connection with this research, it would be very helpful if you would take a few minutes to provide your opinions about how students should behave in the school clinic.

Please fill out the questionnaire on the following page and return it to us, if possible, by February 1, 1974, to the Office of Education and Behavioral Science, Room 7-201, ext. _____.

Your responses are anonymous, so it is not necessary to put your name on the questionnaire. The number in the upper-righthand corner permits matching of questionnaires from members of the same department, keeps track of how many have been returned, and allows for computer coding of the responses.

Thank you for your assistance.

Sincerely,

Judith Essig (Shub) and

_____, D.D.S., Ph.D.
Director, Office of Education
& Behavioral Science

P.S.: Be sure to respond to all 21 items of the questionnaire.

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