Report of a Student-Operated Health Clinic in Gainesville, Florida

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OUTPATIENT CLINICS initiated and operated primarily by medical students have become increasingly common in medically underserved areas during the past few years. The primary goal of these clinics has been to make medical care more accessible to indigent persons whose present care is fragmented among local practitioners and clinics. Participating students have considered the educational experience in treating indigent patients to be a secondary goal only.

The historical background and the activities of these clinics have received a fair amount of publicity in the lay and medical press. However, to our knowledge, there have been no recently published reports of evaluation on the quality of care provided by these clinics or their acceptance by the community being served. Our report describes the utilization patterns and preventive services provided by one such clinic operated by students in Gainesville, Fla.

Background

The Gainesville Volunteer Health Clinic (GVHC) was opened in April 1970 by medical students at the University of Florida School of Medicine. Their goal was to serve the predominantly black, indigent population in northeast Gainesville. The clinic, containing five examining rooms, was located in a small building adjacent to a church. It was open for 3 hours, 2 evenings a week.

Forty-six percent of the fourth-year medical students and 57 percent of the second-year students participated to some degree in the functioning of the clinic. These students initially examined the patients and then presented their findings to a licensed physician. Most faculty members of the school of medicine and a few practicing physicians helped in this fashion. Approximately 67 faculty physicians, 12 local physicians, 62 nursing students, 24 registered nurses, 17 pharmacy students, 5 law students, and residents of the northeast community also volunteered their services.

Basic hematological and bacteriological tests were performed on the premises. Specimens were sent to the University of Florida if more sophisticated studies were needed. Drug samples were donated by pharmaceutical companies.

No fees were collected from the patients during the first 4 months, and a sliding scale of up to $2 per visit was imposed thereafter. The clinic was supported primarily by donations from the University of Florida School of Medicine and the Gainesville community, including the United Fund.

Although the students dealt with the daily administrative problems, the major policy decisions

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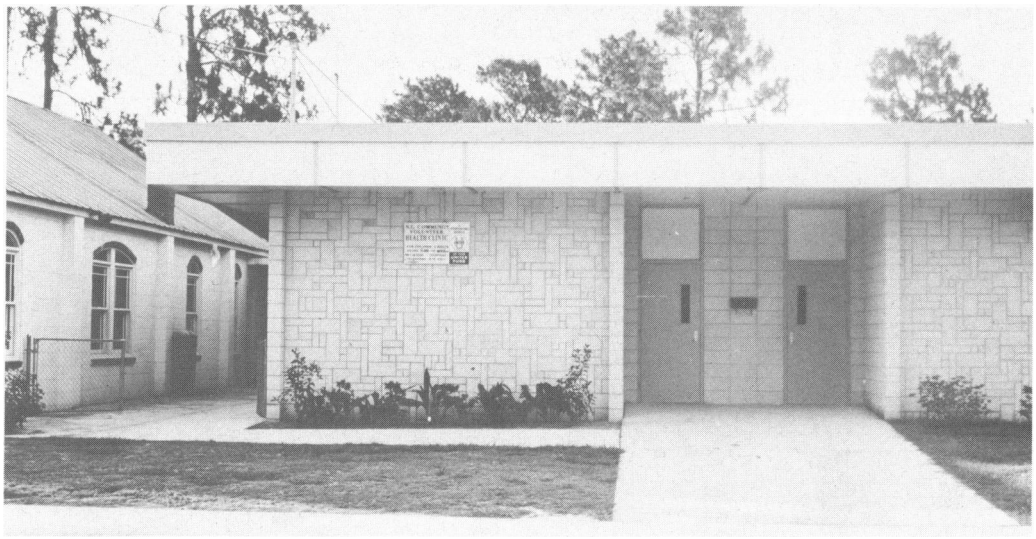


were made by the 18-member GVHC board, composed of 10 local residents, 6 members of the University of Florida faculty, and 2 student administrators.

Clinic Utilization

Between April 1, 1970, and April 30, 1971, 551 persons came to the clinic for a total of 991 patient visits. As shown in figure 1, the majority of patients were black (81 percent) and under 31 years old (75 percent). Fifty-nine percent of the patients were female. The age pattern, however, was strikingly different between races; 62 percent of the white patients were 16–30 years old, whereas only 32 percent of the black patients were in this age range. Most of the white patients were either "hippies" from a fairly large, often transient community in Gainesville or students from a local junior college that provided no medical care.

The use of the clinic according to patients' place of residence is summarized in figure 2. A northeast resident was defined as a person living within 1 mile of the clinic. About 75 percent of the non-northeast residents were white, most of whom were college-age students or "hippies." During the last 3 months of the study, the number of visits by non-northeast patients exceeded the number of visits by residents.

Upper respiratory infections, routine physical examinations (predominantly to satisfy school requirements), genitourinary infections, and rashes represented 77 percent of the problems encountered at the clinic. Antibiotics, including intramuscular and topical preparations, were given 199 times (46 percent) of a total of 434 drugs prescribed (less than one-half a prescription given per patient visit). Tranquilizers were prescribed 15 times (3 percent).

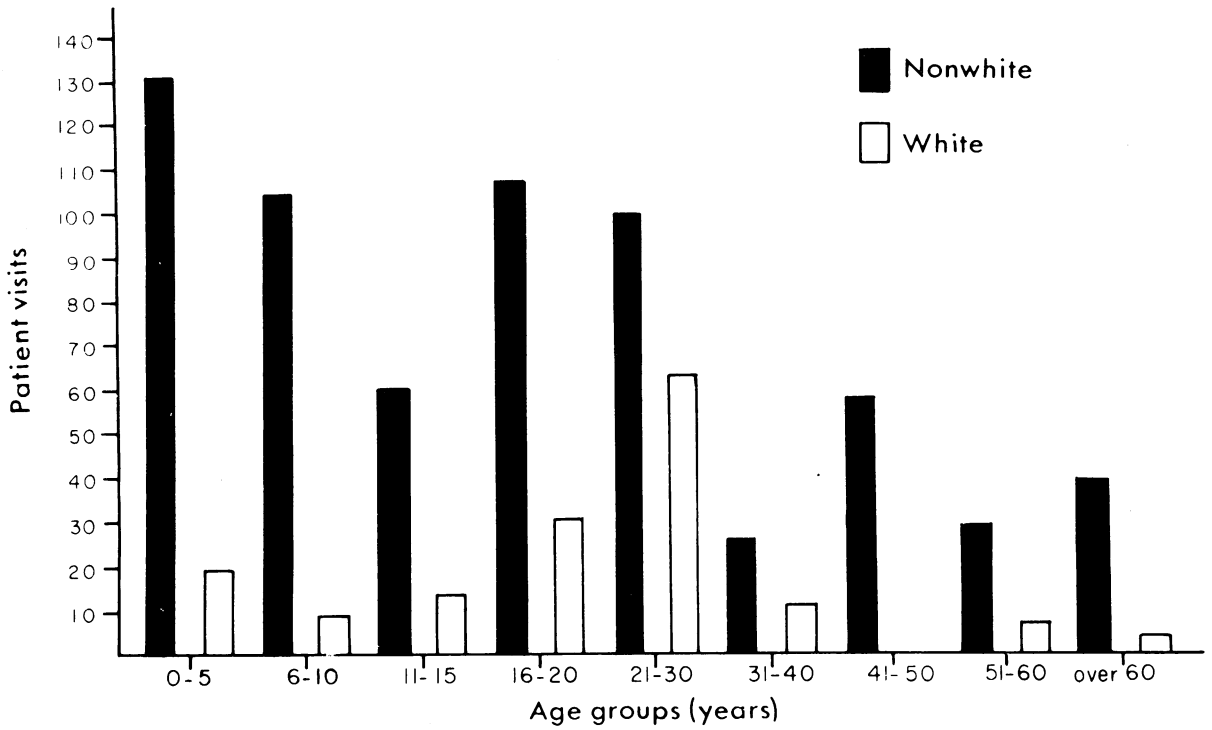
As shown in figure 3, 154 persons, or 28 percent of the patient population, returned to the clinic for at least a second time. There was no significant trend in the number of patients who returned to the clinic for a second or subsequent visit during the course of the 13-month study.

Seventy patients (13 percent) were referred to a specialty or subspecialty (excluding radiology) service at the University of Florida Teaching Hospital. This referral rate includes 194 patients who came to the clinic for routine preschool physical examinations. The reports from 42 (60 percent) of the 70 specialty consultants were not subsequently recorded in the clinic charts; 50 percent (21) of these reports were "no shows" by the patient for his appointment.

Preventive Measures

In 1970, 24 proved new cases of acute pulmonary tuberculosis in the county were reported to the local county health department. Three of the persons affected lived within 1 mile of the clinic, and the only address listed for eight others was a Gainesville post office box. Therefore, since approximately 3,000 persons lived within 1 mile of the clinic, the annual incidence of new cases of pulmonary tuberculosis for northeast "residents"

Figure 1. Use of the Gainesville Volunteer Health Clinic, by age and race of patients, April 1, 1970–April 30, 1971



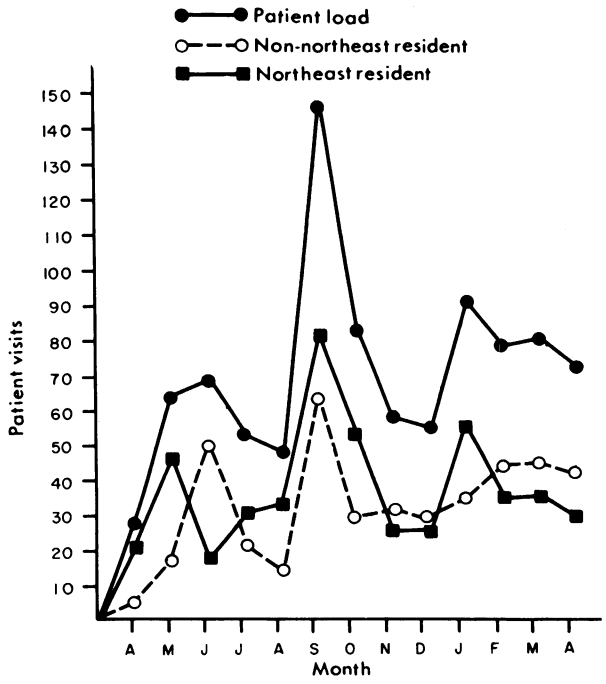
was a minimum of 1 to 1,000. However, skin tests for tuberculosis were given to only 15 (4 percent) of the 357 clinic patients who came for reasons other than physical examinations. The results were not subsequently recorded in the charts of 6 of these 15 patients; 1 had had a markedly positive skin test. The remaining nine patients failed to return for a reading of their skin tests.

During the 13 months of the study, gonorrhea was diagnosed in 36 patients at the clinic, and 19 were given a simultaneous VDRL test for syphilis. Counseling of patients was sporadic, and usually there was no indication in the charts that the health department had been notified of the patient's name and diagnosis for the purpose of contact interviewing. The only patient from whom a repeat smear for gonorrhea was later obtained had returned to the clinic with symptomatic urethritis. No patient received a second VDRL test for syphilis.

Comment

Free or inexpensive, accessible medical care was offered at the Gainesville Volunteer Health

Figure 2. Use of the Gainesville Volunteer Health Clinic, by residence of patients, April 1, 1970–April 30, 1971



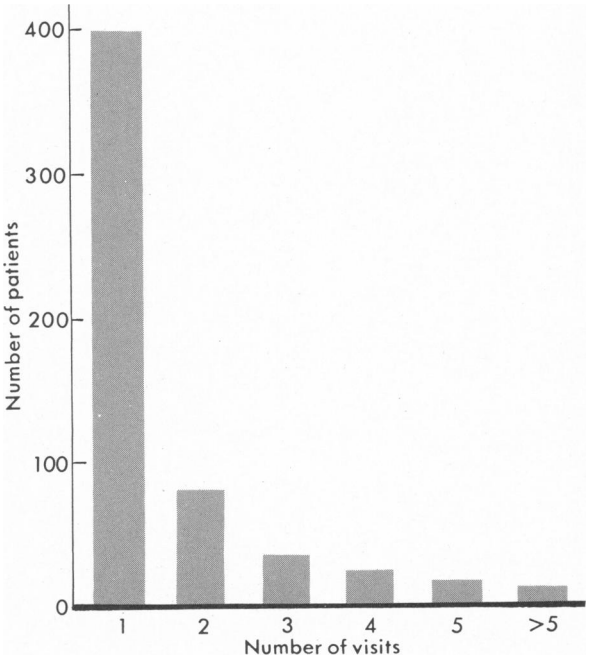
Clinic to a predominantly indigent population. Treatment of acute minor illnesses and performance of routine physical examinations were the major services of the clinic. Many medical and nursing students had an opportunity to observe patients in a setting different from that provided by a medical center.

Acceptance of the clinic by the community appeared to be reasonably good. There was a trend toward greater use of the clinic by non-northeast residents (fig. 2), although a longer period of observation would be required to see if this is truly significant. Another interesting aspect of the use of the clinic was the relatively few patients who came to the clinic on multiple occasions (fig. 3). This pattern may reflect the self-limited nature of their medical problems, their mobility, and a low perceived need for medical care. However, these figures may also suggest a certain dissatisfaction with the type of care rendered at the clinic.

Because of the large number of rotating medical students and faculty, the quality of care provided by the clinic would be difficult to interpret. In this study, we concentrated on problems that would reflect the setting in which the care was given rather than on the abilities of the individual physicians.

The pattern of referrals is one such indicator. The referral of 70 of 551 patients (including 194 who came for physical examinations only) to specialists at the University of Florida seems high. But this referral rate of 13 percent is difficult to compare with rates of other primary care facilities. It has been shown that the frequency of referral varies with the patient's age, income, race, marital status, physician's specialty, and the population density of the locale of practice (*1*). In addition, university-based physicians may have a greater tendency to refer patients than their nonacademic colleagues. In the GVHC clinic setting, the academic physicians may have felt insecure in being asked to treat medical conditions with which they were unaccustomed. The rate of referral may also have reflected doubts of the physicians that many patients could be cared for adequately in a clinic setting in which the students and consultants were constantly changed. Nevertheless, fragmentation of care, which is usually a common problem among the indigent population, was increased by the relatively high rate of referral.

Figure 3. Number of visits and return visits to Gainesville Volunteer Health Clinic, April 1, 1970–April 30, 1971



The fact that replies were received by the clinic to only 40 percent of the referrals to the University of Florida Teaching Hospital must in part be a reflection on the reporting system at the hospital. It also points up a need for a system within the clinic to insure that more complete followup information on its patients is obtained.

The efforts by the clinic in identifying and treating patients with tuberculosis and venereal disease were also sporadic. There were several reasons for this mediocre performance. The clinics were usually busy, and the physicians were preoccupied with treating acute illnesses. Furthermore, many of the students and faculty were probably unfamiliar with the current recommendations pertaining to tuberculosis and venereal disease. No standard protocols were articulated.

The fundamental problem of the preventive programs, as well as of the referral system, was lack of administrative continuity. Medical students, physicians, and nurses continually rotated through the clinic. There was no one in charge of daily activities; no one to see that the health department was notified or that a patient returned for a followup visit. Administrative decisions were usually made informally by two medical students

and one pharmacy student who had helped to start the clinic. Because of the shortage of funds, a part-time administrator was unavailable. Yet, a formal organizational structure was generally thought to be unnecessary by many of the students and may have been passively resisted by a few whose own decision-making opportunities would have been compromised.

A final observation is that none of the more active clinic personnel had initiated an effort to evaluate the quality of care provided in the clinic. Some system of chart review would seem to be especially important because of the rotation of personnel. However, an ongoing evaluation of clinic performance and subsequent correction of the problems could only have been implemented by at least a part-time director. We hope that other student-operated clinics will make evaluations of their services an integral part of the program.

Addendum, May 1973

Several major changes have occurred in the Gainesville Volunteer Health Clinic (now the Northeast Community Health Clinic) during the 2 years since the completion of this study. While the clinic records have not been reviewed again, we have obtained a general picture of the clinic's present status.

The most significant change was the appointment 1 year ago of a part-time director and a part-time licensed practical nurse. Because of this administrative continuity, it is generally agreed that such problems as obtaining medical supplies, maintaining medical records, and the scheduling of physicians and medical students have been improved considerably.

The clinic seems to be on a firm economic basis now. Money from the United Fund, the county health department, and the Department of Community Medicine at the University of Florida, plus the patients' fees (still $2), financially assures the clinic's short-term future.

Currently, the majority of the medical students working in the clinic come from the first- and second-year classes; these students participate only occasionally in administrative decisions. However, the members of the clinic board from the local community continue to be involved in the clinic, which is presently serving 20-25 patients on each of 3 nights a week. The faculty physicians are still generally working in the clinic, although some are reluctant because the medical students have had little or no prior clinical training in physical diagnosis.

During the 4 months after the study, the number of white transient and student patients continued to increase. A separate clinic for these patients was established elsewhere, and the Northeast Community Health Clinic is now predominantly serving the local residents.

We do not have enough information to comment about the extent to which the problems mentioned in our report (high referral rates with incomplete followup data, venereal disease, and tuberculosis detection) have been resolved.

REFERENCE

(*1*) Pendransky, R., and Fox, D.: Frequency of referral and patient characteristics in group practice. Med Care 8: 368–385, September–October 1970.

RUBIN, PETER E. (Patterson Army Hospital, Fort Monmouth, N.J.), and PERRY, JOEL C.: *Report of a student-operated clinic in Gainesville, Florida. Health Services Reports, Vol. 88, October 1973, pp. 772–776.*

A clinic was started by medical students of the University of Florida in April 1970 to serve the medical needs of an indigent, primarily black population in a section of Gainesville, Fla. During the first 13 months, 551 patients were seen for a total of 911 visits. Only 28 percent of the patients returned to the clinic for at least a second visit. The services provided by the clinic were primarily the treatment of acute minor illnesses and routine physical examinations. As the year progressed, proportionately more white teenagers used the clinic facilities.

Several limitations of the clinic's activities were noted. There was a relatively high rate of referral (13 percent) to speciality services at the University of Florida Teaching Hospital. But replies were received by the clinic for only 40 percent of these referrals. Identification and treatment of patients with tuberculosis and venereal disease was sporadic. Although there were several reasons for these problems, the most fundamental appeared to be lack of administrative continuity within the clinic.