Hypertension in the Inner City

I. Analysis of Clinic Dropouts

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SUMMARY
Sixty dropouts from hypertensive clinics were interviewed in depth to determine reasons for noncompliance. Waiting time and a poor doctor-patient relationship were the major reasons given. The average waiting time prior to examination by the doctor was 2.5 hours, and the average waiting time at the pharmacy was 1.8 hours. In contrast the average time spent with the doctor was 7.5 min. The poor doctor-patient relationship deteriorated further since patients were examined by a different physician on each visit. A physician was not essential for compliance, however, since 54% of the patients readily accepted a health aide. In order to enhance compliance our group reorganized its hypertensive clinic using the patients' complaints as guidelines. Operating the clinic with emphasis on a personalized doctor-patient relationship and utilizing a meaningful appointment system has reduced the number of dropouts from 42% in 1966–69 to 8% in 1970–71.

Additional Indexing Words:
Doctor-patient relationship  Clinic patients  Waiting time

EXPERIENCE over the past 20 years with an inner-city population readily attests to the high incidence of hypertension in blacks.1 Seventy-one percent of the District of Columbia population within the inner city is black. Seventy-five percent of the 645 deaths attributed to hypertension in 1965 were in black people. Even more striking was the fact that 88% of the hypertensive deaths below the age of 60 were in blacks.

Detecting and identifying hypertensive subjects will not alter these statistics. Emphasis must be placed on continuous control of blood pressure, which can be accomplished only if the patient remains under medical supervision. Long-term follow-up studies, in the few instances where they have been done, have shown almost universally disappointing results. In the Georgia Hypertension Program,2 for example, only about one third of the newly discovered hypertensives who had been verified, and started on treatment, were still taking their medication and coming back for regular checkups after a period of only 3 months. In addition, 56% of individuals found to be hypertensive on screening were already aware of their condition, and yet were not on medication or under regular medical supervision.

Despite the fact that our group has operated a "well-organized," "efficient" hypertension clinic for the past 15 years in the heart of the inner city the incidence of dropouts was still 42%. Several years ago our group conducted a pilot study to determine the reasons for the high incidence of dropouts in hypertensive clinics. The purpose of this manuscript is to outline our findings.

Materials and Methods

Population
The hypertension clinics at the District of Columbia General Hospital, Washington Hospital Center, Columbia Hospital, and Georgetown University Medical Center agreed to participate in the program. A 5-week period was selected at all operative clinics and the total number of dropouts occurring during that period were scheduled for interview. A patient was defined as a dropout when he missed two or more scheduled appointments during this 5-week period.

The breakdown of the dropout population is shown in table 1. The individual was not informed that he was selected because he was a dropout. Additionally, five subjects from the D. C. General Hospital, eight from Columbia Hospital, and 10 from Washington Hospital Center were selected at random from a scheduled visit and were interviewed to determine whether there were patient differences between dropouts and nondropouts.
Of those interviewed 78.5% were eligible for public assistance and all lived in areas of the city where housing was considered substandard.

**Questionnaire**

The behavioral questionnaire which contained 33 questions was prepared to assess three major objectives: (1) patient attitude toward the professional relationships; (2) patient knowledge of the disease; and (3) patient attitudes toward the economic factors.

These followed a simple explanation that the purpose of the project was to improve medical care through patient involvement. The perceptions of the patient were expected to be conditioned by the inner city environment. The findings, therefore, would be related to race, sex, education, and economic factors. The interviewers selected for the study were carefully prepared to assure attitudes that would not be considered biased or unsympathetic. While the approach to the interview was subjective, several questions were used for verification of the responses.

**Results**

The three key findings that affected the patient's attitudes were: (1) the amount of time he must expend to obtain the needed care; (2) patient intelligence and his understanding of all aspects of his disease; and (3) doctor/paramedical-patient relationship.

Waiting time, i.e. the time necessary to keep an appointment, was the major criticism of 63% of the respondents. At the D. C. General Hospital and at the Washington Hospital Center clinics, waiting time started as soon as the patient entered the clinic door, first at the appointment desk and then at the insurance desk. The average waiting time prior to examination by the doctor was 2.5 hours. The average waiting time at the pharmacy after examination was 1.8 hours. Since most of the patients used public transportation, distance was considered as one more element adding to the problem, but distance was considered less a barrier if the results produced better care.

Many patients were confused as to the seriousness of hypertension. Ninety-five percent knew that hypertension was more serious than a cold; 44% considered hypertension equal to diabetes in importance; 71% considered hypertension to be as equal as heart disease in importance; while 13% felt it to be equated with influenza. Fifty-six percent recognized the need for regular checkups to maintain health and that maintenance of appointments was the vehicle through which they received continuing care. The fact that 79% of the patients did not have a private physician indicates a lower economic experience and an acceptance of the clinic as a primary source for medical care.

In contrast to the long waiting time before and after the patient came in contact with the doctor, the average time spent with the doctor was only 7.5 min. Forty-one percent of patients felt that a primary need existed to spend greater time with the physician in discussing and reviewing their problems. At the Washington Hospital Center and the D. C. General Hospital clinics, the poor doctor-patient relationship was made worse by the fact that the patient was examined by a different physician on each visit. Ninety percent of the group rejected a bonus as an incentive to improve attendance. They gave greater importance to establishing a better doctor-patient relationship. Where a clinic's reputation was such that the patient preferred care at the specified clinic rather than at another he was willing to expend the additional effort for what he considered to be better care.

We were concerned with the patient's acceptance of those who treat him, and we explored the relationship. Twenty-five percent felt they could treat themselves, while 58.7% believed a hypertensive specialist was needed. However, 61% fully accepted the study physician (resident or fellow) and 54.5% accepted the health aide.

Economic costs were not a major factor in noncompliance. As indicated, the population studied was from the lower economic areas. Of the patients interviewed, 78.5% received economic support for medical care while 16% bore the cost of their care personally. While a limited number of patients used taxicabs for transportation, 60% used public transportation. The reported costs at the time the study was made averaged 64 cents for a round trip from home to clinic. Patients were able to absorb transportation costs, but they found transportation time, when added to waiting time at clinics, created critical problems.

**Discussion**

The interviews demonstrate that patients dropped out of clinics not because of lack of
intelligence, disregard for their health, or for economic reasons. To the contrary, the dropout population emerges as an intelligent, concerned group of patients whose motivation was limited by barriers on their time and who clearly viewed the system as not directed to their concerns. There is no evidence of social irresponsibility, nor is there any evidence that patients are not health oriented.

It seems clear that a profile of the model clinic, if structured to patient needs, would be oriented as a patient-education, patient-centered facility focusing on: (1) a major reduction in the time the patient spends in the clinic; (2) a relationship that recognizes the desire of the patient to know more about his disease, the therapy used, and its effects; (3) a clinic which is focused on the patient’s major problems; and (4) a staff which recognizes the perceptiveness and concern of the patient with his well being.

Currently clinics are organized for traditional medical care which is disease dominated rather than patient oriented. Clinics are not organized for a preventive effort. Patients go to the clinic because they are sick, never to “stay well.” If staying well, e.g. prevention of disease, becomes the major objective (and it should) patient compliance will be obtained only by changing the basic structure of clinics.

In an attempt to increase compliance our cardiovascular group reorganized its hypertension clinic several years ago using the patient suggestions for a model clinic as guidelines. There were three major objectives: (1) to develop a personal physician-patient relationship; (2) to provide comprehensive health care on a 24-hour basis for each subject as required; and (3) to provide the services conveniently for the patient.

As a patient was selected for long-term follow-up he was assigned to a physician and health aide who were his source of contact and care. The patients were examined by the same health aide and the same physician at all times. The identification of the patient with the professional and paramedical personnel and their identification with the patient established a personal and uninterrupted relationship similar to that found in private practice.

Comprehensive medical care was considered as total health care. It involved acceptance of responsibility of the health needs of the individual on a 24-hour basis. This was not difficult to accomplish from a practical standpoint since a direct telephone line enabled the patient to contact one of our “on-call” fellows. It included a system for out-patient care, for emergency services, and for hospital admission. Night and weekend coverage through the telephone at the clinic was the continuing contact, although direct contact to the health aide was the normal channel.

The appointment system provided for the clinic visit on a convenient schedule. Appointments were scheduled for 8:15 or 8:25 AM rather than just Monday AM. Prior to the clinic visit, each patient was called and reminded of the appointment. Difficulties affecting compliance were promptly resolved. (These could have been economic, such as transportation or baby-sitters, or they may involve family needs which resource referral may correct.) Medication was provided by the clinic, eliminating the difficulties encountered and time wasted by patients in securing drugs from the various sources now involved in the local public health system.

Operating our hypertension clinic in this fashion has reduced the number of dropouts from 42% in 1966–1969 to 8% in 1970–1971. In a prospective fashion our group is currently comparing the value of personalized medical care with usual clinical medical care in attaining patient compliance and blood pressure control in an inner-city population.3

If these studies verify our preliminary findings and if the results can be documented by other investigators it would seem that the personalized type of delivery of medical services should well be utilized in all chronic-disease programs. It would also seem that such behavioral technics might be utilized in any long-term study where patient compliance is a necessity.

References
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