INCLINATION OF THE AGED POOR TO TAKE THE SICK ROLE

by

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CHAPTER I

INTRODUCTION

Concomitant with the increase in the number of aged persons in our society is a growing realization of their multiple and complex health needs. While the prevalence of illness is particularly high in this segment of the population, it is also true that much of this illness goes untreated. This fact appears to be due not so much to the refusal of health professionals to treat the elderly poor, as to the failure of the elderly to visit hospitals, clinics, or offices in search of medical care, either corrective or preventive. Clearly, illness and the seeking of medical care are two distinct phenomena. Whether or not medical care is sought depends on many factors beside the severity of illness, namely: economic, geographic, social-psychological, and organizational factors.

Under-utilization or non-utilization of medical care is characteristic of many segments of the population. Apparently, some persons respond to pain and illness symptoms by seeking medical care while others with the same symptoms will ignore them. The health care system of Great Britain provides conspicuous evidence that many ill persons do not

make health care visits even when economic obstacles are removed. Thirty-seven per cent of the English families in a sample selected for a Political and Economic Planning Report of 1961 included a member who was suffering from pain but yet was untreated (McKinlay, J. B., 1972). Another example of under-utilization is the failure of many patients who present themselves at medical clinics and physicians' offices to keep return appointments. Case-finding programs also fall short of involving in treatment programs all persons identified as needing help.

The present study was concerned with identifying certain aspects of the health utilization pattern of the indigent aged who have access to a free clinic. Because a great variety of factors appear to influence utilization behavior in the study population, an eclectic approach was adopted, with an emphasis on social-psychological factors.

REVIEW OF THE LITERATURE

A search of the literature revealed that a number of variables have been identified as influencing utilization behavior. Certain approaches to the study of utilization behavior appear to be potentially useful in further understanding of this phenomenon. These approaches include consideration of characteristics of an economic, geographic, social-psychological, or socio-demographic nature and of

the organizational delivery system. The basic arguments for emphasizing the influences of these sets of variables will be summarized below.

ECONOMIC FACTORS: The role of financial barriers in determining health utilization behavior in the United States has received major attention. Studies show that persons from low socio-economic levels, with little money, no medical insurance, and mistrust for physicians have difficulty getting medical care (Smith, D. E., Bentel, D. J., & Schwartz, J. L., 1971). Antonovsky (1972), in an Israeli health utilization study, concluded that a medical delivery system based on federally subsidized payments tends to encourage utilization. Thus, the Israeli subjects averaged 13.5 visits a year. This is in sharp contrast to the United States, which lacks such a federally subsidized system, and where the average is 4.2 visits a year. In an apparent contradiction to this generalization, it has been shown that in Great Britain removal of cost barriers did not eradicate the wide variations in health utilization behavior (McKinlay, 1972). This latter finding suggests, then, that health care utilization is influenced by factors in addition to those imposed by financial prohibitions.

DEMOGRAPHIC FACTORS: Proximity has been reported to be an important factor in increasing utilization. In studying

low income obstetrical patients, Collver (cited in McKinlay, 1972) found that the distance from the patient's home to the clinic affected clinic attendance. Collver suggested, therefore, that utilization could then be increased by placing clinics not more than ten miles apart. On this reasoning, in Great Britain, according to the report of Corwin and Brooks (cited in McKinlay, 1972), over 300 health clinics are situated in neighborhood areas. However, there is some evidence that this reasoning is simplistic. For instance, McKinlay (1972) has shown that certain groups of the lower working class patients in Aberdeen, Scotland, under-utilize medical facilities even when the facilities are very close. Obviously, many questions remain to be answered in determining the effect of proximity on health care utilization.

SOCIAL-PSYCHOLOGICAL FACTORS: Investigation into the social-psychological reasons for differences in health and illness behaviors has not been abundant to date, but appears currently to be increasing. Some new points of departure have been developed by Mechanic and Rosenstock, and their work has enjoyed some degree of empirical validation. The following discussion of social-psychological factors will focus on the areas of perception and motivation.

Perception: Several research studies in the fifties advanced the view that individuals differ in the manner

in which they perceive symptoms. These differences may be accounted for on the basis of the class or social status of the patient. In a community-wide investigation, Koos, E. L. (1954) noted that both perception of symptoms and the ultimate consequences of such perceptions varied systematically with class position. That is, upper class persons more often than lower class persons reported themselves ill and sought treatment. Paradoxically, the lower class persons of the community tended to be more seriously ill and to suffer more disability from a medical point of view.

The importance of ethnicity for the differential perception of symptoms was documented by Saunders (1954). In his study of Spanish-speaking and English-speaking members of a southwestern community, Saunders found that the English-speaking members were more likely to seek professional help. Spanish-speaking persons were not only less likely to consult a physician, but were also less likely to follow through with treatment whether professionally prescribed or suggested by a close member of the community. In short, the Spanish-speaking members did not consider it necessary to do anything about their illness.

While both Koos and Saunders pointed to a relationship between perceptions and utilization of medical services, it remained for Mechanic to develop a more comprehensive

theory of illness behavior. His formulation which relates the individual's illness behavior to his perception of illness is regarded by many as especially insightful. Mechanic (1959) studied male college freshmen in an attempt to determine "proneness to adopt the sick role". He found the actual frequency of visits made to a free medical clinic was strongly associated with a high inclination to seek medical help, as measured by responses to a set of hypothetical medical conditions. This measurement of proneness to seek medical care was significantly related to the person's religion, his social class position, his dependency on others, and the amount of stress he reported. As conceived by Mechanic (1962), the tendency of proneness to adopt the sick role is derived from a learned pattern of behavior influenced by situational contingencies, and indicates the probability with which individuals will react to a given set of symptoms. Therefore, differences in the proneness to adopt the sick role were described as being functions of learning, experience, and availability of medical resources. Mechanic found that persons that were highly prone to adopt the sick role sought medical care more quickly and more frequently when symptoms were present than did persons less prone to adopt the sick role.

Mechanic further suggested that the individual's perception of a given disease and of the appropriateness

of seeking medical treatment are affected by certain characteristics of the disease in question and of the contentual situation. These include: (1) the frequency with which the disease occurs in the population of which the individual is a member; (2) the relative familiarity of the average member of his group with the symptoms of the disease; (3) the predictability of the outcome of the illness; and (4) the individual's estimate of the amount of threat or loss likely to follow from the illness. Mechanic considered the first two characteristics as constituting problems of illness recognition and the last two characteristics as problems of illness danger. Significant others share these same perceptions in evaluating the individual's symptoms and in helping him decide whether or not to seek medical care or take other action. The major contribution of this particular theory is in explicating the influence of individual perceptions of symptoms and diseases on utilization behavior. Hence, some diseases are seen as routine and others as dangerous; and those perceptions, in part, determine the utilization of medical care resources. The common cold, for instance, will probably not be seen as requiring medical care. Hepatitis, being uncommon, will cause more concern and medical care will be viewed as an appropriate action for those afflicted.

Motivation: Rosenstock and his associates carried on

the tradition of Mechanic's work in the sixties, but placed more emphasis on the factor of motivation. Rosenstock's theory was based on three principles (quoted in McKinlay, 1972, P. 123):

> (1) Preventive or therapeutic behavior relative to a given health problem in the individual is determined by the extent to which he sees the problems as having both serious consequences and a high probability of occurrence in his case, and the extent to which he believes that some course of action open to him will be effective in reducing that threat.
>
> (2) Behavior emerges out of frequent conflict among motives and among courses of action. Where motives themselves conflict or compete for attention, those that have the highest value or salience for the individual will actually be aroused.
>
> (3) Health-related motives may not always give rise to health-related behavior and conversely, health-related behavior may not always be determined by health-related motives.

These ideas have had great impact in the field of health utilization research and have generated promising developments. From the first principle it may be inferred that

persons of a low socio-economic level may perceive a health problem, but not be aware that help is available. Drawing on the second principle, it might be predicted that subsistence needs have higher salience for lower socio-economic group members than do considerations of future health or welfare. As an example of the third principle, McKinlay (1972) mentions that lower working class parturient women seek antenatal care for the purpose of booking a bed for confinement or for receiving various maternity benefits rather than preventing complications of pregnancy and ensuring the well-being of herself or her unborn child.

These principles have been accepted by a number of investigators and have been incorporated into an explanatory model. The model is known variously as the Rosenstock Model, the Hochbaum Model, the Behavioral Science Model, and the Health Belief Model. In this model the following conditions must be satisfied for the individual to take health action (Rosenstock, 1966): (1) The individual is psychologically ready to take action relative to a particular health condition. The extent of readiness is defined by whether the individual feels susceptible to the condition in question and the extent to which its possible occurrence is viewed as having serious consequences. (2) The individual believes that the preventive procedure would reduce his perceived susceptibility or the preceived severity of the illness. He then has no serious psycho-

logical barriers to the proposed action. (3) A cue or stimulus must occur to trigger a response so that health action will be taken.

McKinlay (1972) states that increasing importance is being directed toward the above third condition; i.e., the importance of some kind of cue acting on a person or group in a state of readiness for action. Cues may be interpersonal crises, social interference, or the nature and quality of symptoms.

In sum, the basic social-psychological approaches to health utilization have attempted to analyze both the motivating factors, that man behaves in accordance with his needs, and the perceptual factors, that man behaves in accordance with the ways that he sees the world. Perceptual and motivational approaches were significant steps in analyzing illness behavior patterns. The last several decades have shown progressive research in clarifying these dimensions to make perception and motivation viable approaches. Although studies were not found that analyzed perception and motivation in indigent aged populations, this approach could be productive in planning intervention programs for diseases of the indigent aged.

ORGANIZATIONAL DELIVERY SYSTEM FACTORS: The traditional medical facility has been a formal clinic to which the patient comes at a set time for his appointment. Protocol

is established for each step of the visit from the greeting of the patient by uniformed personnel to his dismissal by the well-groomed physician from across the traditional hardwood desk. This impersonal clinic-type approach with specialized services for each ailment, appointments arranged well in advance, and personnel trained to help the middle-class patient can be a difficult situation for the old and/or the impoverished. Partly because of these contingencies, health care expectations and needs of these types of patients are not always met.

More recently investigators have studied the effect of a less formal approach on encouraging health care utilization by certain lower-class members of society. The organizational approach to health care utilization considers the importance of accommodating to the characteristics of the sub-group for which the health care is intended. To increase utilization habits, the routine and methods of the facility are adjusted to be appropriate to the behavior and value system of intended users. Extending services to evening hours, for instance, enables people working during the daytime to visit the health facility during leisure hours. These evening hours provide a convenient time for the working family to transport the elderly person to the place of medical care. Adding ramps to entrances or placing the medical facility in an environment without steps accommodates the disabled and elderly whose

vision may be impaired and whose gait is unsteady.

Recent studies have shown the importance of organizational variables on health utilization patterns of the poor. Free clinics have capitalized on these elements and have incorporated them into the structure of the clinic. As a result, the free clinics are now touted as being particularly effective in bringing the poor into the health care facility.

Free Clinics: Free clinics offer a type of medical service that contrasts to the usual medical care provided by clinics for middle class patients. The approach to the patient is much less formal and represents a departure from the conventional image of a medical clinic. For instance, staff members wear casual dress and frequently have long hair. Language colloquialisms similar to those used by patients are used by staff members. A minimum of background information is obtained about the patient. Service is on a first-come-first-served basis. Names are accepted as given by the patient. Professional and non-professional workers with backgrounds of race or ethnicity similar to those served are encouraged to become staff members. Many patients become volunteer workers. There is an attempt to identify with the group served in ways that will add to patient comfort.

Free clinics are of three types according to their

origination: (1) Neighborhood clinics are frequently established in areas of medical need by political or religious groups. The Black Panther Clinics, for example, were originated by this black political group for black neighborhoods in need of medical care. (2) Youth clinics originated out of a need for drug education and counseling among the young and were sponsored by concerned citizens and service agencies of the community. It was hoped that an impersonal approach to drug problems would influence users and non-users to become aware of the dangers involved in illicit drug practices. (3) "Street" clinics are the most common type of free clinic enterprise. They are frequently established to care for drug and drug-related problems by volunteer organizations or groups. The resulting free clinic is referred to as a sponsored clinic. The clinic of this study is an independently sponsored "street clinic" meeting medical needs of an aged population. The established organization, in this case, offers necessary funding to hire professionals for a clinic when this need cannot be met with volunteers. The major need of an area may cause a clinic to specialize.

All types of free clinics are similar in that services are offered without direct charge to the patient. Volunteer services are depended upon. Often relevant professional services are available by referral. The service characteristically offered is unencumbered by a minimum of

conventional bureacracy, of overt moral judgment, and of elaborate protocol. "Health care as a right and not a privilege" (The National Free Clinic Council, 1971), is the premise on which free clinics are based.

The Haight-Ashbury Free Clinic deserves mention as its opening in June, 1967, marked the beginning of the Free Clinic Movement. Typically a street clinic, Haight-Ashbury initially offered drug treatment and counseling, abortion counseling, and medical care of many varieties. Later, Haight-Ashbury developed into a drug treatment program that was funded by the National Institute of Mental Health (Smith, et al, 1971).

Free clinics tend to become specialized to meet the medical problems that are prevalent in selected areas. These problems vary from those associated with alcohol in an area of derelicts, to drug problems in university districts, to pediatric problems in family areas. An example is Portland's "Outside In" which opened in the university district and originally extended medical care to the "flower children" on the edge of the university community. With drug crises having mainly passed, the emphasis on youth has lessened in the clinic. Another example, Isle Vista Open Door Clinic of Santa Barbara began in 1970 with the purpose of offering medical care to the surrounding ghetto area. The population served was found to include permanent residents, young transients, and students. There was a

decided emphasis on youth problems. The services offered were physical examinations, and treatment for conditions such as upper respiratory infections, genital infections, urinary tract infestions, musculoskeletal problems, dermatology problems, gonorrhea, and drug-related problems (Smith, et al, 1971).

A 1970 survey (Smith et al, 1971) has estimated that there were at least 126 free clinics in existence at that time. They were located mostly in cities throughout the United States, in Hawaii, and in Canada. Many clinics were located close to major universities to be available to the street people of the cities who frequent the fringes of the intellectual areas.

In summary, the alienated among the young have caused the growth of a new form of medical care to supply needs of persons who tend to reject organized medical care. Many of the free clinics appear to have become permanent institutions. They have maintained organizational attitudes that contrast to those of the usual clinics. By degree of formality, location, and structure, they are designed to meet the needs of the people they serve. A further growth of free clinics throughout the United States and Europe is predicted (Smith, et al, 1972).

Although free clinics have been predominantly for the young, there are elements in their form of medical service that could meet health needs of the indigent aged.

Reaching out to encourage medical care, minimizing formalities, and immediate availability of service for acute illnesses are among the features that increase utilization patterns in aged populations.

Other Facilities Offering Health Care to the Aged and Poor: The nature of medical needs of the elderly has been well recognized in recent years to the point of forcing the enactment of federal legislation. Thus, Medicare, Title 19 Medicaid, and Office of Economic Opportunity projects help meet these needs. All have set criteria for use of the programs by the elderly. OEO clinics, for instance, demand residency and proof of inability to pay for medical care. Medicare requires monthly subscription and Medicaid is intended for people assisted by State Welfare Programs.

Veterans' Hospitals were established after World War I to provide life-long care to all who had served in the armed forces of the United States. Their associated clinics and extended care facilities were developed to offer health and maintainance care to all meeting minimal service criteria (Medical Care of the Veteran in the U. S., 1963). Hospitals are strategically located across the United States in metropolitan centers. Many elderly men are veterans with access to the Veterans' Hospitals and clinics. However, many of the potential patients are hindered by the

formality and bureaucracy of this large hospital organization. Persons living outside a convenient commuting radius find distance an additional barrier to use of Veterans' facilities.

Estranged individuals among the elderly, as among the youthful, do not always fit into the established health care system that has been provided for them. These older persons frequently present needs similar to those of the youth in that the health problems are present, but reluctance exists in regard to using established medical services.

SETTING FOR THE STUDY

The free clinic of the present study was established for the elderly population of the Grand Avenue Area of Portland, Oregon. Initially a social center for senior citizens (individuals 55 years of age and over) was established in a store front on Grand Avenue by staff members of the Volunteers of America. It soon became evident that medical problems associated with the social service problems were overwhelming. In response to these medical needs of the senior citizens of this indigent area, the Volunteers of America sponsored a free clinic open weekly on Thursday mornings.

SUMMARY

According to the literature, salient features that affect health care utilization include proximity, economic

factors, and the organization of the health delivery system. Support for the position that social-psychological factors affect utilization was derived mainly from the work of Mechanic (1959). Before Mechanic, Koos (1954) had found that socio-economic status influenced perception of symptoms and thereby the decision to seek health care. Additionally, Saunders (1954) claimed ethnicity was related to variation in perception of symptoms. Mechanic then, on this premise that a person's decision to seek health care is based on his perception of that illness developed a "proneness to adopt the sick role" measure. Rosenstock (1966) proposed a more formally inclusive model encompassing both health and illness behavior. This model enables health professionals to analyze specific motivations of individuals to seek health care.

Medicare, Medicaid, OEO clinics and Veterans' Hospitals offer health care to the elderly poor. Free clinics have developed to meet specific needs of many groups of the poor. Impediments to health care delivery such as the inconvenience of travel, financial barriers, formalities of appointments, and technical explanations of problems have been removed in an attempt to promote health care utilization by persons who avoid organized medical clinics.

The free clinic studied here was developed in response to health needs of a specific group of indigent aged persons. The clinic was designed to accommodate patients with financial problems, no transportation, and many fears of

formal situations. The clinic staff hoped that the more isolated members of the community as well as established persons would seek health care at this free clinic.

The aim of this study was to further understanding among health professionals of the role of perception of illness on the utilization behavior patterns of an indigent aged population with a high incidence of disease. The study group presented a unique opportunity to examine the influence of this variable when other variables which may compete as explanatory factors in understanding health utilization are held constant. Here the subjects were basically similar in their demographic, financial and geographical characteristics. Organizational delivery systems factors were also similar for all subjects. One might then ask: what part does perception of illness play in utilization habits in persons who are indigent and aged?

PURPOSE OF THE STUDY

The purpose of the study was to ascertain (1) to what extent is the frequency of seeking medical care related to the tendency to assume the sick role in a population of senior citizens? (2) Does a free clinic placed in a poverty area neighborhood increase the health care utilization of senior citizens who accept care from this facility as compared to senior citizens who use other medical facilities exclusively?

In addition to these specific questions, the data were examined for other relationships that increase or hinder medical care utilization.

HYPOTHESES

The major hypothesis posed in the study is that the extent wo which a person visits medical facilities is a function of his proneness to assume the sick role. On the basis of Mechanic's prior work, it was anticipated that the most frequent users of health care facilities would be those with a high proneness to assume the sick role.

The second hypothesis is that the number of visits to medical facilities would be greater for Free Clinic Group subjects than for a Non-clinic Group who used other medical facilities exclusively.

CHAPTER II

METHOD

SUBJECTS

Fifty male members of the Senior Center and/or Free Clinic who were 55 years of age or over and resided in Census Tract 11A known as the Buckman Area agreed to participate in this study. Twenty-five persons were selected from patients of the Free Clinic and are referred to as the FC Group. Twenty-five persons had not made use of Free Clinic services and are referred to as NC (Non-Clinic) Group. All persons were contacted during their visits to the Senior Center.

PROCEDURE

After the subject agreed to participate in the study, a structured interview was conducted by the investigator. This circumvented reading or writing handicaps of the subjects. Responses were recorded by the interviewer as they were given. Approximately 45 minutes were taken for each interview.

DEMOGRAPHIC CHARACTERISTICS

Demographic information was obtained from answers to eight questions (The data are summarized in Table 1.). The two groups of subjects showed the following char-

acteristics:

Age: The mean age of the total study group was 63.38 years. The mean age for the NC group was 64.8 years and the range was 55 to 83 years. The mean age for the FC Group was 61.9 years and the range was 55 to 74 years. The median test was applied to the ages of the two groups, and the difference between them was not significant (X^2 = .028).

Education: The educational level of the entire sample averaged 10.6 years. This exceeds the national average of 8.9 years (Riley, M. W. & Foner, A., 1968) for persons 55 years of age and older.

The mean years of education were 10.8 and 10.5 for the NC Group and the FC Group respectively. One subject in the FC Group had only a grade school education and one had a college education. The two groups were almost identical in educational levels.

Marital Status and Living Arrangements: Most subjects in the total study group were non-married, with only three of the NC Group and four of the FC Group married. Eighty-six per cent of the subjects were single and lived alone. Only one of the NC group and three of the FC group were living with their wives.

Ninty-two per cent of the subjects lived in apartments and rooming houses of the area (See Table 1.). The Magnolia, under the east end of the Hawthorne Bridge,

TABLE 1. DEMOGRAPHIC CHARACTERISTICS OF NC and FC GROUPS

Characteristic	NC (N=25)	FC (N=25)	Total (N=50)
Age			
Range	55-83	55-74	55-83
Mean	64.84	61.92	63.38
Years of Education			
Range	7-14	6-16	6-16
Mean	10.8	10.5	10.6
Marital Status			
Divorced	8	12	20
Never Married	8	6	14
Widowed	6	3	9
Married	3	4	7
Living Companions			
Alone	22	21	43
With Spouse	1	3	4
With Friend	2	1	3
Type of Dwelling			
Apt/Furn. Rm/ Brdg. Hse.	22	24	46
Own House	1	1	2
Rent House	1		1
No Answer	1		1
Rental Amount			
Range	$0-80	$0-101	$0-101
Mean	$51	$56	$53
Work Status			
Disabled	10	16	26
Retired	13	7	20
Other	2	2	4
Income			
Range	$0-260	$95-417	$0-417
Mean	$185	$141	$163
Source of Monthly Income*			
Welfare	4	12	16
SSI	20	20	40
Other	4	7	11

*More than one source of income was reported in some instances.

the Bridgeport, on the east end of the Burnside Bridge, and the Osborne, on Grand Avenue, are among the typical dilapidated places of residence. The apartment houses are situated in an area divided by frequent main arterial routes filled with rushing automobiles. Noise, smoke, and vibrations penetrate the interiors of the apartments. The apartment buildings are separated from one another by commercial structures tending to isolate the people from each other. The neighborhood contact is minimal and there is little feeling of being part of a community.

Rental Amount: In this poverty area, the subjects paid rents ranging from $30 to $80 per month. The mean amount was $53 per month in the entire sample. Although the housing was sub-standard, this amount represented 33 per cent of the average monthly income of the subjects.

The mean rental amount in the NC Group was $51. One subject in this group lived with a friend without paying rent and another lived in a Salvation Army dormitory without charge as he had no money. One subject owned his own home and no answer was given by one subject.

The mean amount of rental money paid in the FC Group was $56. One subject owned his own home.

Work Status: The study subjects of both groups described their work status as retired and/or unemployed due to disability in most cases. Only two subjects, who were in the FC Group, were found to be self employed; they were an upholsterer and a watch maker.

Income: Many of the study subjects had become eligible for Social Security benefits before age 65 because of medical disability. The income levels were comparable with other retired persons.

Oregon State Assistance (Welfare) Grants were received by a greater number of subjects in the NC Group than the FC Group. Grants from the Welfare Department supplemented income from other sources in some instances to bring it up to minimum standards.

The monthly income range for subjects in this study was from $0 to $417. The mean amount was $163. This compared closely with Oregon's average for the elderly population (The League of Women Voters, 1973). The range of income amounts was from $0 to $260 per month in the NC Group and from $94 to $417 in the FC Group. One subject from each group refused to answer and another from the NC Group had no income at the time of the interview.

INTERVIEW SCHEDULE FOR DATA COLLECTION

The introductory section was designed to collect demographic data for the purpose of describing the two study groups. The Interview Schedule was designed to gather information on the following three topics: (1) Illness Behavior, (2) Perceived Health Problems, and (3) Health Care Utilization.

Illness Behavior: Section I of the Interview Schedule was an adaptation of Mechanic's Index of

proneness to visit medical facilities as an assessment of adopting the sick role. Three hypothetical situations with increasing severity of symptoms were used to elicit information regarding illness behavior. This duplicated the strategy used in Mechanic's study. Mechanic (1959, p. 37) used the question:

> During the past school year would you have reported to the Stanford Health Service in the following hypothetical situation: a) You have been feeling poorly for a few days, b) You felt you had a temperature of about 100, c) You felt you had a temperature of 101?

The choice of answers was selected from among the following alternatives: "certainly, probably, not very likely, and very unlikely." Whereas Mechanic's study pertained to symptoms of illness in relatively healthy college students, the present study was concerned with symptoms of illness in older people who are more subject to chronic illness. Therefore, the question used was: "During the past year, would you have gone to a doctor or come to the Free Clinic in the following situations: (a) You had been feeling poorly for a few days, (b) You felt you had a high temperature (chills and fever), (c) You had chest pain that did not stop." The available choices of answers were the same as those presented by Mechanic. The scoring method and the subsequent criteria for composition of the proneness groups were also modeled after Mechanic. Answers to each of these three questions were scored: Very Unlikely=0,

Not Very Likely = 1, Probably = 2, and Certainly = 3. Scores could range from 0 - 9. Responses were added to arrive at a total proneness score. On the basis of these scores, subjects were dichotomized into two groups:

1. High Proneness Group with scores ranging from 6 - 9.

2. Low Proneness Group with scores ranging from 0 - 5.

Perceived Health Problems: To initiate a trend of thought about their personal health problems, subjects were first queried about the medications they took. Next, the subjects were asked about health problems they were currently experiencing. Illnesses perceived as "problems" by the subjects were tabulated to describe the patient's view of his own health condition. (See Section II of the Interview Schedule).

The illnesses listed by the subjects as "health problems" were tabulated in the following categories: Cardio-vascular, Orthepedic, Respiratory, Gastro-Intestinal, Alcoholism, Emotional, Cancer, Genito-urinary, Skin, Diabetes, and None. The subjects of this study were prompted to visit the medical facilities as a result of chronic illness associated with their age while the younger subjects of Mechanic's study (1959) had experienced acute illnesses.

The Cornell Medical Index was used in this study to provide a standardized measure of overall physical status of each of the subjects of the study. This was a particular advantage due to the fact that a physical examination was documented for only the FC Group. The CMI makes available a large amount of data comparable to that recorded in comprehensive hospital medical histories. These data can be used for diagnostic and prognostic appraisals of the patient's total medical problem (Brodman, K., Erdmann, J. J., Lorger, I. & Wolff, H. G., 1949).

The CMI consists of 195 questions designed to elicit the reporting of general symptoms of physical and medical illness, plus specific diseases. The CMI was designed to be a reliable method of obtaining important facts about a patient's medical history in study situations such as this when medical appraisal is not possible. In addition to the CMI, a question was also asked of each respondent about his current health problems.

Health Care Utilization: The utilization of health care by the two groups of the study population was determined by answers to questions in this section. Questions 1 through 10 asked how medical care was obtained and from what medical facilities care was obtained.

ANALYSIS OF THE DATA

Expressed Proneness to Adopt the Sick Role and Actual Visits to Health Care Facilities: The respondents were dichotomized at the median according to the number of visits made to medical facilities. Persons making three visits or fewer were classed as "low visitors" and persons making four or more visits were termed "high visitors". The Chi-square test was used to assess the significance of the relationship between "proneness" to use medical facilities and frequency of visits.

Perceived Illness Problems: The CMI scores of the subjects of each group were calculated. These scores were compared with standardized scores from other related studies in the literature. Those subjects with scores over 30 were considered as showing emotional disturbances.

Health Care Utilization: The number of visits to medical facilities by subjects of the FC group was compared to the number of visits by the NC group. The Chi-square technique was used to test the difference in number of visits of the two groups.

CHAPTER III

RESULTS

The results are discussed in relation to the subject characteristics and then in relation to the two hypotheses in which the following variables were tested for a significant relationship: (1) The extent to which a person visits medical facilities is a function of his proneness to assume the sick role. It was hypothesized that the most frequent users of health facilities would have a high proneness to assume the sick role. (2) The number of visits to medical facilities would be greater for Free Clinic Group subjects than for non-clinic group subjects who used other facilities. Additional descriptive data that were pertinent to the study are also presented.

SUBJECT CHARACTERISTICS

The two groups of male senior citizens who were the subjects of the study have been shown to be similar in age, income, living arrangements, and educational background. They had similar knowledge of the existence and convenience of the Free Clinic as they were

all participants in the Senior Center. Therefore, it was assumed by the researcher that illness behavior would not differ because of variations in these characteristics of the two groups.

The scores on the CMI in the study population were generally higher than those reported for regular clinic patients by Brodman, et al (1953). Whereas those othors presented a mean CMI score of 23 for men aged 55 and over, in the present study a mean CMI score of 30.28 for the NC Group and 32.68 for the FC Group was revealed.(See Table 2.) It may be noted that the two groups of this study are very similar in terms of "overall physical status".

TABLE 2. CORNELL MEDICAL INDEX SCORES FOR THE NC AND FC GROUPS

CMI Scores	NC N= 25	FC N = 25
Mean	30.28	32.68
SD	22.13	21.37
Scores over 30	10	9
Section M-R Scores over 30	6	5

The mean CMI scores for Sections A-L was 25.1 for the NC Group and 26.36 for the FC Group. The mean score for Section M-R showed 4.92 in the NC Group and 6.32 in the FC Group.

CMI scores in excess of 30 have been taken by Brodman, et al (1953), Lawton (1959), and Abramson, J. H., Terespolsky, L., Brook, J. G & Kark, L. L., (1965) as a cut-off point indicating the presence of emotional illness as well as physical illness in the patient's health condition. Nine persons from the NC Group and 10 persons from the FC Group had high CMI scores. Conclusions from these findings are that a high percentage of persons from both study groups have evidence of emotional illness, and the two study groups are similar in this respect. Any difference between the two groups cannot be accounted for on the basis of CMI scores or the previously mentioned subject characteristics.

VISITS TO HEALTH FACILITIES AND PRONENESS TO TAKE THE SICK ROLE

The first hypothesis stated that those subjects who were the most frequent users of health facilities would be most prone to take the sick role. In testing this hypothesis it was first necessary to measure the

expressed proneness to take the sick role of the subjects. Scores for proneness to take the sick role ranged from 0 - 9 in both the NC and FC groups. The median for both groups was 4.6.

Health utilization scores ranged from 0 - 12 visits in the NC Group and from 2 - 12 visits in the FC Group. The median number of visits was 2.44 and 6.51 in the NC and FC Groups respectively. The median for both groups combined is 4.48 visits. This is a very similar figure to the 4.3 visits for persons aged 45 and over reported by the National Health Survey. (Riley and Foner, 1968).

No significant relationship was found between expressed proneness to use medical facilities and frequency of visits to such facilities (X^2=1.94,n.s.) for subjects of both groups taken together. (See Table 3.)

No significant relationship was found between expressed proneness to use medical facilities and frequency of visits to such facilities (X^2=2.88, n.s.) for the NC Group (See Table 4).

No significant relationship was found between expressed proneness to use medical facilities and frequency of visits to such facilities (X^2=3.78, n.s.)

for the FC Group (See Table 5.)

TABLE 3. EXPRESSED PRONENESS TO USE MEDICAL FACILITIES AND ACTUAL VISITS TO SUCH FACILITIES: FOR BOTH GROUPS (N=50)

Expressed Proneness to Use Medical Facilities	Actual Visits to Medical Facility	
	High (4 or more)	Low (0-3)
High Expressed Proneness (N=22)	13	9
Low Expressed Proneness (N=28)	11	17

TABLE 4. EXPRESSED PRONENESS TO USE MEDICAL FACILITIES AND ACTUAL VISITS TO SUCH FACILITIES: FOR THE NC GROUP (N=25)

Expressed Proneness to Use Medical Facilities	Actual Visits to Medical Facility	
	High (4 or more)	Low (0-3)
High Expressed Proneness (N=13)	5	8
Low Expressed Proneness (N-12)	0	12

TABLE 5. EXPRESSED PRONENESS TO USE MEDICAL FACILITIES AND ACTUAL VISITS TO SUCH FACILITIES: FOR THE FC GROUP (N=25)

Expressed Proneness to Use Medical Facilities	Actual Visits to Medical Facility	
	High(4 or more)	Low (0-3)
High Expressed Proneness (N=9)	8	1
Low Expressed Proneness (N=16)	8	8

ADDITIONAL FACTORS INFLUENCING PRONENESS

There is not significance in the relationship between proneness and visits until additional factors are considered. In light of Mechanic's (1959) work where emotional stress was shown to be an important variable in predicting utilization of health services, it was of interest to ascertain the effect of the stress factor from the CMI in this study. For the purpose of this analysis, the amount of emotional distress was measured by the score on the M-R sections of the CMI.

When the emotional disturbance of the subjects in both groups was considered with the scores for high proneness to take the sick role, there was statistical

significance in the correlation with high visits to medical facilities. (X^2 = 4.46, p. .05) (See Table 6.)

TABLE 6. FREQUENCY OF VISITS AMONG SUBJECTS IN BOTH GROUPS ACCORDING TO PRONENESS SCORES AND CMI SCORES

Proneness & CMI	High Visits	Low Visits
High Proneness High M-R CMI	7	2
All others	16	25

(X^2=4.46, p. $\geq$ .05)

ADDITIONAL FACTORS RELATING TO THE SEEKING OF MEDICAL CARE

Additional information was collected that has value for understanding the factors that influence the decision to seek medical care by the subjects of the study. This information concerned types of illness, number of illnesses, sources of medical help used when illness struck, medical facilities used for regular health and illness care, means of transportation used by the subjects to arrive at medical facilities, choices of physician, and attitudes toward the Free Clinic.

TYPES OF ILLNESS PROBLEMS

Multiple illness problems were listed by the subjects of both study groups. The subjects reported making visits to health facilities for several problems at one time. It was the original plan to ascertain the types of health problems that required a greater number of visits. However, this was not possible due to the multi-disease problems of these subjects. Cardiovascular, orthopedic, respiratory, gastrointestinal, alcohol, and emotional types of problems were highly prevalent in both study groups. (See Table 7.)

TABLE 7. TABULATION OF DISEASES REPORTED BY SUBJECTS

DISEASE	NC (N=25)		FC (N=25)		TOTALS (N=50)	
	N	%	N	%	N	%
Cardiovascular	15	60	17	68	32	64
Orthopedic	9	36	11	44	20	40
Respiratory	5	20	16	64	21	42
Gastrointestinal	8	32	5	20	13	26
Alcoholism	5	20	6	24	11	22
Emotional	4	16	4	16	8	16
Cancer	1	4	3	12	4	8
Genito-urinary	2	8	2	8	4	8
Skin			3	12	3	6
Diabetes	1	4	1	4	2	4
Eye & ear	1	4	3	12	4	8

*Adds up to more than 100% because some subjects reported more than one illness.

NUMBER OF ILLNESS PROBLEMS REPORTED

The number of illness problems reported by the subjects in the NC Group was 52 and in the FC Group was 68. The mean for the NC Group was 2.08 problems and 2.72 in the FC Group. (See Table 8) One subject in the NC Group reported no problems. It is readily apparent that these two groups show no great difference in number of illness problems.

TABLE 8. NUMBER OF REPORTED HEALTH PROBLEMS BY NC AND FC GROUPS

	NC	FC	TOTAL
Total problems	52	68	110
Range	0-5	1-7	0-7
Mean	2.08	2.72	2.4

SOURCES OF MEDICAL HELP

The greatest number of subjects of the total study group sought medical care when ill by reporting to a hospital where they were cared for by the emergency room physician. Subjects often relied upon the police to evaluate the illness and arrange for transportation to the emergency room of a hospital when medical care

was deemed necessary. A friend, the druggist, or a relative might be consulted about the illness. Few subjects called a private physician for advice (See Table 9.)

TABLE 9. MAIN SOURCE OF MEDICAL HELP FOR NC AND FC GROUP SUBJECTS

Source of Help	NC N = 25		FC N = 25		TOTALS N=50	
	N	%	N	%	N	%
Hospital	12	48	9	36	21	42
Private Doctor	3	12	2	8	5	10
Friend	4	16	3	12	7	14
Police	3	12	7	28	10	20
Druggist			1	4	1	2
Relative	3	12	2	8	5	10
No Answer			1	4	1	2

MEDICAL FACILITIES USED

Because the Free Clinic operates as a referral agency when further diagnostic and laboratory procedures or hospitalization are needed, the subjects were questioned as to medical facilities used in addition

to the Free Clinic. The subjects of the NC group made primary use of other facilities. The University Hospital complex, including the emergency room and clinic system, was listed by 30 per cent of subjects in both groups. (See Table 10). Services in that complex are paid for by Welfare and Medicare. Twenty per cent of the subjects used Veterans' Hospital. Nine subjects (36 per cent) of FC group subjects used only the Free Clinic. Of the nine NC group persons who did not visit health facilities during the past year, six of them gave no answer to the question as to where they would go for medical visits. (See Table 10)

TABLE 10. MEDICAL FACILITIES USED BY SUBJECTS OF NC AND FC GROUPS

MEDICAL FACILITY	NC		FC		TOTAL	
	N	%	N	%	N	%
University Hospital	7	28	8	32	15	30
Veterans' Hospital	6	24	4	16	10	20
Private Hospital	6	24	4	16	10	20
Free Clinic Only			9	36	9	18
None	6	24			6	12

TRANSPORTATION TO MEDICAL FACILITIES

Transportation to where medical help could be obtained was said to be by taxi in 52 per cent of the NC subjects and 40 per cent of the FC subjects. Public transportation was allegedly used by 28 per cent of NC subjects and 48 per cent of FC subjects. Few private cars were available to people of the area. (See Table 11)

TABLE 11. MEANS OF TRANSPORTATION USED BY SUBJECTS OF NC AND FC GROUPS

TRANSPORTATION	NC		FC		TOTALS	
	N	%	N	%	N	%
Taxi	13	52	10	40	23	46
Police	7	28	4	16	11	22
Bus	7	28	12	48	19	38
Private car	1	4	4	16	5	10
No answer	4	16	2	8	6	12

*Adds up to more than 100% because multiple answers permitted.

It would appear that many logistic problems deterred these subjects from seeking medical attention. Difficulties such as boarding the bus, having to stand

during the bus trip, transferring from bus to bus, high cost of taxi service, long waits in the emergency room, and stigma attached to calling the police often occurred. However, of those 33 subjects answering the query, 24 responded that they did not feel that getting medical help was a problem. Understandably, the FC group experienced less difficulty. (See Table 12)

NUMBER OF VISITS TO MEDICAL FACILITIES

The second hypothesis stated that the number of visits to medical facilities would be greater for Free Clinic subjects than for Non-clinic subjects. This hypothesis was supported with the following findings: There was a significant difference reported between the two groups in number of visits to a medical facility. This was tested with the Chi Square analysis (X^2 = 15.70, p. $>$ .01)(See Table 12)

The mean number of visits in the NC Group was 2.44 visits for a twelve-month time period, and was 6.52 in the FC group. The range was wider in the NC Group with a large number of the NC Group having made no visits to medical facilities. The mean number of

visits for the total sample was 4.48 visits for the twelve-month time period. This figure is remarkably close to the National Average for persons 55 years of age and older which is 4.3 visits for the twelve-month time period. (Riley & Foner, 1968).

TABLE 12. NUMBER OF VISITS FOR A 12 MONTH TIME PERIOD OF FC AND NC GROUP SUBJECTS

VISITS	FREQUENCY		
	NC	FC	TOTAL
0-3	20	6	26
4-12	5	19	24

REPORTED VISITS COMPARED TO RECORDED VISITS

The reported number of visits to the Free Clinic as given by the subjects were compared to visits recorded in Free Clinic charts in FC Group subjects (See Table 13). The number of subjects reported visits was 133 while the staff recorded number is 163. Only 9 subjects (36 per cent) erred in their estimation of visits. Moreover, of those 9, the tendency was to underestimate the frequency of visits by most subjects.

Only one subject over-estimated his physician visits.

TABLE 13. NUMBER OF VISITS REPORTED BY FC GROUP COMPARED TO NUMBER OF VISITS RECORDED

Code No.	Reported Visits	Recorded Visits	Error
26	4	8	-4
27	8	10	-2
28	12	12	
29	10	10	
30	3	9	-6
31	6	5	+1
32	6	10	-4
33	6	6	
34	4	4	
35	3	3	
36	4	4	
37	9	9	
38	8	8	
39	8	12	-4
40	6	6	
41	1	5	-4
42	3	6	-3
43	2	2	
44	7	11	-4
45	4	4	
46	3	3	
47	2	2	
48	2	2	
49	2	2	
50	10	10	
Totals	133	163	

CHOICE OF PHYSICIAN OF NC AND FC GROUPS

Many subjects in both groups stated that they had no doctor even though FC persons were seeing the physician at the Free Clinic. Approximately one/half of the FC Group subjects did name the Free Clinic physician as their doctor. (See Table 14)

TABLE 14. CHOICE OF PHYSICIAN OF NC AND FC GROUPS

Doctor	NC		FC		Totals	
	N	%	N	%	N	%
Free Clinic Physician	0	0	13	52	13	26
Private doctor	8	32	5	20	13	26
No one	11	44	7	28	18	36
Veterans and County Hospital Staff	6	24			6	12
Totals	25	100	25	100	50	100

ATTITUDE ABOUT FREE CLINIC

It was of interest to learn the subjective attitudes of the study subjects about the Free Clinic facilities. The question was open-ended to allow expression. The answers were inspected and a content analysis was done by the researcher. There was a trend in the total group not to respond, but this was mainly among the NC Group.

TABLE 15. ATTITUDE TOWARD FREE CLINIC FOR NC AND FC GROUPS

FEELING	NC		FC		TOTAL	
	N	%	N	%	N	%
Positive	3	12	17	68	20	40
Negative	3	12	0	0	3	6
No answer	19	76	8	32	27	54
Totals	25	100	25	100	50	100

Subjects of the study demonstrated frequent visits to health care facilities when high proneness to take the sick role and stress occurred. Chronic diseases were present in the subjects to cause health care visits to be made for multiple illnesses. There were many obstacles to seeking medical care but complaints were uncommon and the group tendency was to make no response.

CHAPTER IV

DISCUSSION

The study population was composed of fifty elderly men who lived in a designated poverty area of southeast Portland. They moved frequently from one low rent apartment of the area to another or were homeless when their money was stolen or used for alcohol. These men lived alone for the most part and had few, if any, friends. Most of the subjects had no occupation to identify with at this time of their lives and there was identification with no other groups.

Health and illness care for the population has been sparse and fragmented. Welfare has paid for care from the University Hospital and Clinic for welfare recipients, but this facility was distant and has transportation obstacles. There were very few requests made for health maintenance, physical examination or minor illnesses. The impediments to getting medical care resulted in these people asking for assistance only when they were very ill or feeling very desperate.

The staff of the Volunteers of America Senior Center were often the recipients of requests from the study population with acute problems. The Free Clinic

was the result of these requests. The Free Clinic was originally situated in a store front next to the Senior Center. Elderly persons of the study reacted similarly to younger "street people" described by Smith, et al, (1972) in their response to the Free Clinic. Whereas the younger people in the area had drug problems and related illnesses, the older male residents of the area had alcohol and related problems. Malnutrition, nervousness, liver cirrhosis, open skin sores, and lice were among the problems found in these men. Patients presented severe chronic diseases that had not received care. Many of the people of the area came to the Free Clinic for care, but many did not come.

An enigma of the situation is the factor that kept NC Group subjects from using the Free Clinic for their medical care. Although the reasons for the non-utilization of the Free Clinic by the NC Group subjects was not explored, it was noted by the researcher that many NC Group subjects appeared as patients in the Free Clinic soon after the research interview. Could programs be designed that would acquaint all older members of this low-economic area with available medical facilities and result in increased health care utilization? Could staff members and participating clinic patients

assume the role of "significant others" (Mechanic, 1962) to influence older persons to seek health care on a preventive and maintenance basis?

For the purpose of the study, medical information care was not available for members of the NC Group because of their use of assorted other medical facilities in the community by some of the group and use of no medical facilities by others. To standardize the medical information for all subjects, it was of interest to use the CMI for both the Free Clinic and Non-clinic Groups.

A recent review of the use of the CMI as an epidemiological tool cites numerous studies which support the value of the CMI for this purpose. It is particularly noted as an indicator of emotional health (Abramson, J.H., Terespolsky, L., Brook, J. G. & Kark, L. L., 1965). The scores from the present study exceeded standardized scores by Brodman, et al (1953), Abramson, et al (1965), and Lawton (1959) that indicate average outpatient populations. As well as indicating increased physical symptoms, these high CMI scores are reported by the same authors to indicate higher degrees of emotional ill health. These variables of increased physical illness and emotional problems and their possible inter-relationship with other

variables will be presented in the course of the discussion.

VISITS TO HEALTH FACILITIES AND PRONENESS TO TAKE THE SICK ROLE

The major hypothesis of this study was that the extent to which a person visits medical facilities is a function of his proneness to assume the sick role. This hypothesis, which was supported by Mechanic's (1959) findings in a young population of male college students was not substantiated in this study. Perhaps the difference in results of the two investigations is due to the difference between Mechanic's study population and the population of this study in age, educational level, socio-economic level, and types of illness. All of these factors may have contributed either singly or collectively to affect the relationship between the variables. The main similarity was that both populations were entirely male.

For the persons of the FC Group who professed low proneness to assume the sick role, there was no difference in frequency of visits. That is, they were just as likely to make many visits as few. However, the high proneness subjects in this group did make more

visits. In the NC Group, those who professed a low inclination to visit medical facilities all made a low number of visits. In the NC Group, those with high proneness showed no substantial difference. One could ask if the inconvenient conditions of seeking medical care used by these NC Group persons kept them from seeking care, while the availability of the Free Clinic promoted a more optimum availability of facilities for the FC Group subjects.

High CMI scores in relation to the factor of high proneness to take the sick role are of particular interest. The high scores on the CMI might be equated with the stress factor used by Mechanic (1959). The interaction of numerous symptoms and of emotional illness as shown by high M-R scores on the CMI resulted in 78 per cent of persons with these predilections making high frequency visits to medical facilities. Mechanic (1959) investigated the relationship between stress and proneness to assume the sick role to find 73 per cent of college students of his study with this interaction making high frequency visits to the college health services.

It seems logical, therefore, to assume that persons with the combinations of emotional symptoms

and high proneness are the persons who are most likely to frequently use medical facilities. People who are in distress are postulated by Mechanic (Kosa, J. A., Antonovsky, A. & Zola, I.K., 1972) as being motivated by emotional needs to use medical services. The problems that are presented by these persons to the physician are not necessarily related to apparent physical symptoms. A high receptivity to medical services is shown by the high proneness to adopt the sick role.

Stress seems to be an underlying and very important factor in initiating and maintaining health care utilization in the study model as designed by Mechanic (1959). Stress seems to be a similarly important factor in Rosenstock's (1966) Health Belief Model as initiating health care utilization.

This particular instance of high proneness combined with emotional stress does not yet approximate the visitation rate that was shown by Antonovsky (1972) with an Israeli population. Habits in the Israeli population were credited to utilization of the physician in the role of a counsellor similar to counselling from a Rabbi. This need for counselling might be equated with the high emotional needs found by this study to be of consequence in predicting high health

care utilization.

Reported Health Problems: When subjects were asked the health problems that bothered them, they reported similar amounts from the NC to the FC Group. The combined group mean of 2.4 problems was probably an underestimation of the actual health conditions present. However, a higher incidence of health problems was reported than was shown on a National Health Survey (Riley & Foner, 1968) for individuals of this age group. Reported problems of the study group are similar to those reported by Koos (1954) for lower social class members of his study community. Koos reported that these low socio-economic persons tend to under-estimate their problems. Saunders (1954) accredited this under-reporting to ethnicity in his study of a Spanish-American community. This factor of ethnicity, although not documented, was apparent in several subjects of the present study who were known to be American Indians.

Many cases of severe chronic disease were noted among the study subjects. Emphysema, for example, was often in very advanced stages as shown on pulmonary function studies. Coronary diseases and vascular disease were also found in the study subjects in advanced stages of the disease. Perhaps the subtle onset

of many chronic diseases has delayed subjects from seeking health care especially among persons with a low proneness to take the sick role. Other factors that may have contributed to a neglect of medical care are: lack of significant others to help interpret the significance of symptoms (Mechanic, 1961), lack of motivational factors as described by Rosenstock that would help identify symptoms as a source of conflict with the conflict resolvable by medical care (McKinlay, 1972), or a perceived or actual lack of a medical facility to visit as given importance by McKinlay (1972). Could there have been control of these chronic disease conditions if health facilities had been convenient and available when disease symptoms were initially detectable?

A smoking control program in the Free Clinic served to bring emphysema to the attention of the study subjects of the FC Group. Subjects came to the Free Clinic asking for help for their breathing difficulties after many years of enduring this problem. The many emphysema problems reported by the FC Group subject (See Appendix) show the high incidence of emphysema reported by members of the smoking control program. Do NC Group subjects have at least as high an incidence of these same symptoms that they have not been made aware of? Could community level programs be significant in encouraging

older, indigent persons to seek health care for chronic disease symptoms?

NUMBER OF VISITS AND FACILITIES USED

The second hypothesis that the number of visits to medical facilities would be greater for Free Clinic Group subjects than for Non-clinic Group subjects who use other facilities was confirmed by a significant difference in health visits in the two groups of study subjects. Persons of the FC Group made high frequency of medical care visits among those professing low proneness to assume the sick role while the opposite was true of NC Groups subjects. Having the Free Clinic centrally located, convenient, and a part of the social center may be a contributing factor to use of this facility by FC Group subjects. Transportation, encouragement to come, and the prevailing open staff attitude may be among the factors operating to encourage health care utilization among FC subjects. Advantages of locating health centers as a central aspect in the neighborhood are discussed by Collver (cited in McKinlay, 1972). Located in a storefront leased from the tavern owner next door, the Senior Center with its associated Free Clinic was frequented

by the lonely and indigent older men of the community. It was interesting to note that when the Senior Center outgrew these facilities and moved into a house a few blocks away, then many of the men did not continue to come to the Senior Center or the Free Clinic although information, transportation, and increased facilities were offered. Free Clinic utilization aimed at treating older patients may be positively affected by the central location among the population served as noted by Smith, et al (1972).

An interesting example that again shows ease of access, and proximity to the service as functioning to increase health care utilization is as follows: Study subject Number 13 (Appendix B) reported that he was receiving health care from a retired physician who visited the apartment building of the study subject every six weeks to care for persons in that residence who required a medical care visit. The subject had established this medical visit schedule with this physician earlier in his life and was fortunate enough to be able to maintain the pattern with even more ease after the physician no longer used an office. The subject reported a yearly total of eight visits.

ADDITIONAL FACTORS THAT INFLUENCED THE SEEKING OF MEDICAL CARE

Information reported by study subjects demonstrated that there is under-utilization of the University Hospital facilities, Veterans Hospital, and private hospitals and offices used by the study subjects. The medical facilities mainly used by the study subjects were without cost to them, but are inconveniently located on a hill on the opposite side of the city. These clinic visits are reported to require long waiting periods. Emergency room visits in the University facility are reported as requiring even longer waiting. Specialty clinics in the University Hospital require appointments made many weeks in advance. These inconveniences result in fragmentation and lack of continuity of health care by users.

Under-utilization of health care facilities in the NC group is similar to findings from Great Britain (McKinlay, 1972) where a nationalized, relatively efficient, and free health service has not been able to eradicate variations by social class in rates of use of available medical facilities. Those established medical groups who have opposed the concept

of free medical care in this country use this information from Great Britain to argue that even with free health care, individual utilization of medical facilities varies independently of the medical needs of the population served.

It was an unexpected finding of this study to learn that Medicare, designed for the aged and indigent, was not being subscribed to by most of the subjects of the study. These subjects found that the process of subscribing to the program was more complex, perhaps, than they could comprehend. Additonally, the subjects stated that they could not afford the monthly payment or the initial deduction fee required for hospital and doctor's services.

The subjects of the study were all of a low socio-economic level, at least at the time in their lives when the study was conducted. According to Koos (1954) persons of low socio-economic levels of society tend to make few medical care visits. Based on Koos' findings, the persons of this study would be expected, in general, to put little importance on their own good health. A low tendency to utilize medical facilities is shown clearly by the 20 persons of the NC group and the 6 persons of the FC group (who report low frequency

visits to medical facilities). Although the economic factor was presumably of less importance in influencing the number of medical care visits in facilities used by study subjects (since free care was given), 52 per cent of the total group were shown to be below the National average in number of health visits. That is, this large proportion of the study population made less than 3.4 visits to medical facilities per year in spite of having medical facilities available to them without charge. These findings of under-utilization are similar to those of McKinlay of lower working class patients in Aberdeen, Scotland, and to findings in Great Britain (McKinlay, 1972).

An objective view of the Free Clinic shows that at the time of the study it did not provide adequate service in terms of available time. In spite of this deficit, health care utilization behavior was significantly increased in the study population. There were many subjects who did not keep scheduled return visits or try to use this available medical facility in a comprehensive manner. Perhaps the prime motivating factor for seeking health care was crisis or acute illness in a large segment of the study population. This need could not usually be met at the Free Clinic

with the limited time of service.

Koos (1954) found the druggist to be an important health care person. The druggist was little used in this capacity by the subjects of this study because there is not a drug store located within the area. Antacids and asperin are available in the community grocery store.

The police were found to be influential in the decision to seek meedical care. Officers were frequently called by apartment managers to decide whether medical care should be sought and the transportation method to be used. Intoxication was notorious for obscuring the disease symptoms in study subjects.

When questioned about likes and dislikes in relation to the Free Clinic, these men of the study tend to have almost no opinion to express, or, perhaps, feel that their opinion has no importance. They request no community voice for their section of the city. Community control by business men who own the industries and dilapidated apartment houses does not benefit these residents of the area. Improved housing as well as other community improvements mean only an increased cost-of-living with higher food prices and rental amounts to compound already existing monetary problems.

In sum, the methods of obtaining medical help, medical facilities of the community that were used, transportation methods used to arrive at medical facilities, and attitudes that prevailed among the study subjects were found to influence the amount and/or choice of health facilities used. The trend of illness behavior indicated that the convenience of the health care facility was of immediate importance for promotion of adequate utilization habits. The Free Clinic, while having many obstacles that prevented optimum health and illness care, had documented how convenience in location could positively affect health care utilization.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

SUMMARY

The first hypothesis of this study, that the extent to which a person visits medical facilities is a function of his proneness to visit medical facilities, was not supported. The second hypothesis that the number of visits to medical facilities would be greater for subjects attending a free clinic than for subjects who used other medical facilities exclusively, was supported.

The population represented in the study is a poverty area group of single men living in old apartment houses in the Buckman area of Southeast Portland. Subjects were chosen from members of a National Service Agency Senior Center located in the area. Twenty-five subjects made medical care visits to a Free Clinic established by the National Service Agency and 25 subjects used other community health facilities exclusively for medical care.

Except for the Free Clinic, open only on Thursday mornings, no medical facilities are available within the area. Study subjects were found to use

Veteran's Hospital and the University Hospital Complex for most of their medical care. Few visits were made to private hospitals and physician's offices.

Visits to health facilities were found to be far more frequent in the Free Clinic group as was anticipated. The Free Clinic group averaged 6.52 visits per person for a twelve-month time period while the Non-clinic group averaged 2.44 visits for the same period. The number of illness problems, however, was very similar between the NC and FC group as shown on the Cornell Medical Index.

CONCLUSIONS

1) Utilization of health facilities is increased in a centrally located neighborhood health facility.

2) Increasing the service time of the Free Clinic would increase health care utilization for members of both study groups.

3) Community education programs focused on symptoms of chronic disease would increase the awareness of persons afflicted by that disease and encourage health care measures to be taken.

4) Health care utilization is influenced by multiple factors as well as proneness to take the sick role in an older indigent population with chronic disease symptoms.

5) Emotional stress in combination with proneness to assume the sick role appears to be highly related to the level of health care utilization in this group of older indigent persons.

6) Medical care should be geared to health maintenance in poverty area populations with a high incidence of chronic disease.

RECOMMENDATIONS

As a result of this exploratory study, it is recommended that:

1) This study be replicated in an aged population of persons of a middle socio-economic level in a clinic situation such as the Permanente Clinic.

2) Further reasons for non-use of medical facilities should be explored. The factors of stress and alienation might be investigated.

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APPENDICES

APPENDIX A

Interview Guide

Name_____

Address_____

INTERVIEW SCHEDULE DEMOGRAPHIC DATA

1. How old are you?_____
2. Circle the Highest Year You Reached In School

1 2 3 4 5 6 7 8	1 2 3 4	1 2 3 4
Elementary School	High	College

3. Marital Status: Married_____Divorced_____Separated_____
   Widowed_____Never Married_____Date of Marriage_____
4. With whom are you living at present time?_____
5. Type of residence: Apartment_____Furnished Room_____Room with relative_____Boarding House_____Own House_____Rented House_____
6. Rental Amount?_____
7. Are you now? Retired_____Working_____Disabled_____Sick Leave_____
   Other_____
8. Monthly Income? $_____ Source? Social Security_____
   Salary_____Savings_____Welfare Grant_____
   Retirement_____Sick Pay_____Other_____

SECTION I. HEALTH BEHAVIOR

During the past year, would you have gone to a doctor or come to the Free Clinic in the following situations:

	Certainly	Probably	Not Very Likely	Very Unlikely
You have been feeling poorly for a few days	C	P	NVL	VU
You felt you had a high temperature (chills & fever)	C	P	NVL	VU
You had chest pain that did not stop	C	P	NVL	VU

SECTION II HEALTH PROBLEMS
PART I

1) What medications are you taking at this time? Please itemize:

1)_____ 5)_____
2)_____ 6)_____
3)_____ 7)_____
4)_____ 8)_____

2) What health problems do you have at the present time? Please itemize:

1)_____
2)_____
3)_____
4)_____
5)_____
6)_____
7)_____
List further problems on the back and check here_____

SECTION IV HEALTH CARE DELIVERY
PART III

1. If you were to become ill (very), where would you turn for help?

   Private doctor_____ Friend_____Clergyman_____Police_____

   Relative_____Druggist____Clinic or Hospital_____

   Other_____

2. How do you travel to where medical help is available?_____

3. Is this a problem to you?_____

4. Do you come to the Free Clinic for Health Care?_____

5. If you do not go to the Free Clinic for health care, where do you go?

   _____

6. Do you go other places as well?_____How many times have you gone for medical help in the past 12 months?_____

7. If you have gone other places in addition to those mentioned, what are they?_____ How many visits?_____

8. Who do you consider your doctor?_____

9. If you go to the Free Clinic for health care, how do you feel about going there?_____

10. How many times have you gone there in the past 12 months?_____

M

145. Do you sweat or tremble a lot during examinations or questioning? Yes No
146. Do you get nervous and shaky when approached by a superior? Yes No
147. Does your work fall to pieces when the boss or a superior is watching you? Yes No
148. Does your thinking get completely mixed up when you have to do things quickly? Yes No
149. Must you do things very slowly in order to do them without mistakes? Yes No
150. Do you always get directions and orders wrong? Yes No
151. Do strange people or places make you afraid? Yes No
152. Are you scared to be alone when there are no friends near you? Yes No
153. Is it always hard for you to make up your mind? Yes No
154. Do you wish you always had someone at your side to advise you? Yes No
155. Are you considered a clumsy person? Yes No
156. Does it bother you to eat anywhere except in your own home? Yes No

N

157. Do you feel alone and sad at a party? Yes No
158. Do you usually feel unhappy and depressed? Yes No
159. Do you often cry? Yes No
160. Are you always miserable and blue? Yes No
161. Does life look entirely hopeless? Yes No
162. Do you often wish you were dead and away from it all? Yes No

O

163. Does worrying continually get you down? Yes No
164. Does worrying run in your family? Yes No
165. Does every little thing get on your nerves and wear you out? Yes No
166. Are you considered a nervous person? Yes No
167. Does nervousness run in your family? Yes No
168. Did you ever have a nervous breakdown? Yes No
169. Did anyone in your family ever have a nervous breakdown? Yes No
170. Were you ever a patient in a *mental* hospital (for your nerves)? Yes No
171. Was anyone in your family ever a patient in a *mental* hospital (for their nerves)? Yes No

P

172. Are you extremely shy or sensitive? Yes No
173. Do you come from a shy or sensitive family? Yes No
174. Are your feelings easily hurt? Yes No
175. Does criticism always upset you? Yes No
176. Are you considered a touchy person? Yes No
177. Do people usually misunderstand you? Yes No

Q

178. Do you have to be on your guard even with friends? Yes No
179. Do you always do things on sudden impulse? Yes No
180. Are you easily upset or irritated? Yes No
181. Do you go to pieces if you don't constantly control yourself? Yes No
182. Do little annoyances get on your nerves and make you angry? Yes No
183. Does it make you angry to have anyone tell you what to do? Yes No
184. Do people often annoy and irritate you? Yes No
185. Do you flare up in anger if you can't have what you want right away? Yes No
186. Do you often get into a violent rage? Yes No

R

187. Do you often shake or tremble? Yes No
188. Are you constantly keyed up and jittery? Yes No
189. Do sudden noises make you jump or shake badly? Yes No
190. Do you tremble or feel weak whenever someone shouts at you? Yes No
191. Do you become scared at sudden movements or noises at night? Yes No
192. Are you often awakened out of your sleep by frightening dreams? Yes No
193. Do frightening thoughts keep coming back in your mind? Yes No
194. Do you often become suddenly scared for no good reason? Yes No
195. Do you often break out in a cold sweat? Yes No

History Number_____

(MEN)

CORNELL MEDICAL INDEX

HEALTH QUESTIONNAIRE

Date_____

Print Your Name_____ Your Home Address_____

How Old Are You?_____ Circle If You Are . . Single, Married, Widowed, Separated, Divorced.

Circle the Highest Year You Reached In School | 1 2 3 4 5 6 7 8 | Elementary School | 1 2 3 4 | High | 1 2 3 4 | College

What Is Your Occupation?_____

Directions: This questionnaire is for ***MEN ONLY.***
If you can answer **YES** to the question asked, put a circle around the (Yes)
If you have to answer **NO** to the question asked, put a circle around the (No)
Answer all questions. If you are not sure, guess.

A

1. Do you need glasses to read? Yes No
2. Do you need glasses to see things at a distance? Yes No
3. Has your eyesight often blacked out completely? Yes No
4. Do your eyes continually blink or water? Yes No
5. Do you often have bad pains in your eyes? Yes No
6. Are your eyes often red or inflamed? Yes No
7. Are you hard of hearing? Yes No
8. Have you ever had a bad running ear? Yes No
9. Do you have constant noises in your ears? Yes No

B

10. Do you have to clear your throat frequently? Yes No
11. Do you often feel a choking lump in your throat? Yes No
12. Are you often troubled with bad spells of sneezing? Yes No
13. Is your nose continually stuffed up? Yes No
14. Do you suffer from a constantly running nose? Yes No
15. Have you at times had bad nose bleeds? Yes No
16. Do you often catch severe colds? Yes No
17. Do you frequently suffer from heavy chest colds? Yes No
18. When you catch a cold, do you always have to go to bed? Yes No
19. Do frequent colds keep you miserable all winter? Yes No
20. Do you get hay fever? Yes No
21. Do you suffer from asthma? Yes No
22. Are you troubled by constant coughing? Yes No
23. Have you ever coughed up blood? Yes No
24. Do you sometimes have severe soaking sweats at night? Yes No
25. Have you ever had a chronic chest condition? Yes No
26. Have you ever had T.B. (Tuberculosis)? Yes No
27. Did you ever live with anyone who had T.B.? Yes No

C

28. Has a doctor ever said your blood pressure was too *high?* Yes No
29. Has a doctor ever said your blood pressure was too *low?* Yes No
30. Do you have pains in the heart or chest? Yes No
31. Are you often bothered by thumping of the heart? Yes No
32. Does your heart often race like mad? Yes No
33. Do you often have difficulty in breathing? Yes No
34. Do you get out of breath long before anyone else? Yes No
35. Do you sometimes get out of breath just sitting still? Yes No
36. Are your ankles often badly swollen? Yes No
37. Do cold hands or feet trouble you even in hot weather? Yes No
38. Do you suffer from frequent cramps in your legs? Yes No
39. Has a doctor ever said you had heart trouble? Yes No
40. Does heart trouble run in your family? Yes No

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1300 York Avenue, New York, N. Y. 10021

D

41. Have you lost more than half your teeth? Yes No
42. Are you troubled by bleeding gums? Yes No
43. Have you often had severe toothaches? Yes No
44. Is your tongue usually badly coated? Yes No
45. Is your appetite always poor? Yes No
46. Do you usually eat sweets or other food between meals? Yes No
47. Do you always gulp your food in a hurry? Yes No
48. Do you often suffer from an upset stomach? Yes No
49. Do you usually feel bloated after eating? Yes No
50. Do you usually belch a lot after eating? Yes No
51. Are you often sick to your stomach? Yes No
52. Do you suffer from indigestion? Yes No
53. Do severe pains in the stomach often double you up? Yes No
54. Do you suffer from constant stomach trouble? Yes No
55. Does stomach trouble run in your family? Yes No
56. Has a doctor ever said you had stomach ulcers? Yes No
57. Do you suffer from frequent loose bowel movements? Yes No
58. Have you ever had severe bloody diarrhea? Yes No
59. Were you ever troubled with intestinal worms? Yes No
60. Do you constantly suffer from bad constipation? Yes No
61. Have you ever had piles (rectal hemorrhoids)? Yes No
62. Have you ever had jaundice (yellow eyes and skin)? Yes No
63. Have you ever had serious liver or gall bladder trouble? Yes No

E

64. Are your joints often painfully swollen? Yes No
65. Do your muscles and joints constantly feel stiff? Yes No
66. Do you usually have severe pains in the arms or legs? Yes No
67. Are you crippled with severe rheumatism (arthritis)? Yes No
68. Does rheumatism (arthritis) run in your family? Yes No
69. Do weak or painful feet make your life miserable? Yes No
70. Do pains in the back make it hard for you to keep up with your work? Yes No
71. Are you troubled with a serious bodily disability or deformity? Yes No

F

72. Is your skin very sensitive or tender? Yes No
73. Do cuts in your skin usually stay open a long time? Yes No
74. Does your face often get badly flushed? Yes No
75. Do you sweat a great deal even in cold weather? Yes No
76. Are you often bothered by severe itching? Yes No
77. Does your skin often break out in a rash? Yes No
78. Are you often troubled with boils? Yes No

G

79. Do you suffer badly from frequent severe headaches? Yes No
80. Does pressure or pain in the head often make life miserable? Yes No
81. Are headaches common in your family? Yes No
82. Do you have hot or cold spells? Yes No
83. Do you often have spells of severe dizziness? Yes No
84. Do you frequently feel faint? Yes No
85. Have you fainted more than twice in your life? Yes No
86. Do you have constant numbness or tingling in any part of your body? Yes No
87. Was any part of your body ever paralyzed? Yes No
88. Were you ever knocked unconscious? Yes No
89. Have you at times had a twitching of the face, head or shoulders? Yes No
90. Did you ever have a fit or convulsion (epilepsy)? Yes No
91. Has anyone in your family ever had fits or convulsions (epilepsy)? Yes No
92. Do you bite your nails badly? Yes No
93. Are you troubled by stuttering or stammering? Yes No
94. Are you a sleep walker? Yes No
95. Are you a bed wetter? Yes No
96. Were you a bed wetter between the ages of 8 and 14? Yes No

GO TO NEXT PAGE

H

97. Have you ever had anything seriously wrong with your genitals (privates)? Yes No
98. Are your genitals often painful or sore? Yes No
99. Have you ever had treatment for your genitals? Yes No
100. Has a doctor ever said you had a hernia (rupture)? Yes No
101. Have you ever passed blood while urinating (passing water)? Yes No
102. Do you have trouble starting your stream when urinating? Yes No
103. Do you have to get up every night and urinate? Yes No
104. During the day, do you usually have to urinate frequently? Yes No
105. Do you often have severe burning pain when you urinate? Yes No
106. Do you sometimes lose control of your bladder? Yes No
107. Has a doctor ever said you had kidney or bladder disease? Yes No

I

108. Do you often get spells of complete exhaustion or fatigue? Yes No
109. Does working tire you out completely? Yes No
110. Do you usually get up tired and exhausted in the morning? Yes No
111. Does every little effort wear you out? Yes No
112. Are you constantly too tired and exhausted even to eat? Yes No
113. Do you suffer from severe nervous exhaustion? Yes No
114. Does nervous exhaustion run in your family? Yes No

J

115. Are you frequently ill? Yes No
116. Are you frequently confined to bed by illness? Yes No
117. Are you always in poor health? Yes No
118. Are you considered a sickly person? Yes No
119. Do you come from a sickly family? Yes No
120. Do severe pains and aches make it impossible for you to do your work? Yes No
121. Do you wear yourself out worrying about your health? Yes No
122. Are you always ill and unhappy? Yes No
123. Are you constantly made miserable by poor health? Yes No

K

124. Did you ever have scarlet fever? Yes No
125. As a child, did you have rheumatic fever, growing pains or twitching of the limbs? Yes No
126. Did you ever have malaria? Yes No
127. Were you ever treated for severe anemia (thin blood)? Yes No
128. Were you ever treated for "bad blood" (venereal disease)? Yes No
129. Do you have diabetes (sugar disease)? Yes No
130. Did a doctor ever say you had a goiter (in your neck)? Yes No
131. Did a doctor ever treat you for tumor or cancer? Yes No
132. Do you suffer from any chronic disease? Yes No
133. Are you definitely *under* weight? Yes No
134. Are you definitely *over* weight? Yes No
135. Did a doctor ever say you had varicose veins (swollen veins) in your legs? Yes No
136. Did you ever have a serious operation? Yes No
137. Did you ever have a serious injury? Yes No
138. Do you often have small accidents or injuries? Yes No

L

139. Do you usually have great difficulty in falling asleep or staying asleep? Yes No
140. Do you find it impossible to take a regular rest period each day? Yes No
141. Do you find it impossible to take regular daily exercise? Yes No
142. Do you smoke more than 20 cigarettes a day? Yes No
143. Do you drink more than six cups of coffee or tea a day? Yes No
144. Do you usually take two or more alcoholic drinks a day? Yes No

TURN TO NEXT PAGE

History Number_____

(MEN)

CORNELL MEDICAL INDEX

HEALTH QUESTIONNAIRE

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APPENDIX B

Tables of Individual Illness as to Proneness & Visit Level

Code No.	Health Problem	Proneness Score	No. of Visits
01	stomach trouble	7	0
02	legs broken stroke alcohol	7	1
03	emphysema ulcer	0	3
04	mental illness	3	0
05	heart trouble ulcer liver trouble high blood pressure poor circulation	6	11
06	paralyzed legs ulcerative cholitis	7	0
07	back injury hip injury hearing loss	6	2
08	prostate problems	0	2
09	emphysema	7	4
10	broken legs	1	2
11	high blood pressure arthritis	3	2
12	pacemaker emphysema	8	6
13	diabetis high blood pressure nerves stroke	8	8
14	tuberculosis (in past) cancer (for checkup)	9	2
15	ankles swell	8	2

Code No.	Health Problem	Proneness Score	No. of Visits
16	prostatitis difficulty falling asleep	3	1
17	Sinusitis and cold	4	0
18	angina	2	0
19	alcoholism hammer toes heart trouble	3	0
20	weak legs poor appetite alcohol	1	0
21	heart trouble hardening of arteries epilepsy indigestion	7	12
22	old fracture (separation)	8	0
23	stomach trouble alcoholism high blood pressure	3	0
24	no problems	2	1
25	nerves swollen legs alcohol	2	2
26	cannot see stumbles hard of hearing	3	8
27	asthma heard condition arthritis	7	10
28	high blood pressure	7	12
29	heart trouble high blood pressure emphysema	3	10

Code No.	Health Problem	Proneness Score	No. of Visits
30	emphysema slipped disc broken hip	7	9
31	cancer of lung nerves alcoholism	0	5
32	blackouts from clots heart trouble emphysema alcoholism	4	10
33	mental problems constipation dizziness	6	6
34	leg and back injury emphysema	3	4
35	difficulty urinating sleeping problems alcoholism	6	3
36	stomach problems bad leg back trouble frequency of urination	4	4
37	glaucoma arthritis	9	9
38	emphysema tuberculosis	4	8
39	heart trouble emphysema asthma alcohol	8	12
40	heart trouble bad back alcoholism	3	6
41	cancer of bladder ankles swell	9	5

Case No.	Health Problem	Proneness Score	No. of Visits
42	slight bad heart bad liver alcohol	6	6
43	constipation nervous tension high blood pressure	4	2
44	varicose veins swelling of legs	5	4
45	arthritis of left hip prosthetic right hip	5	4
46	cancer of throat sinusitis discoid lupus sore throat	4	3
47	cut forehead cut mouth	0	2
48	varicose veins diabetis	4	2
49	arhtritis head cold	4	2
50	heart trouble feet swell	0	10