1972

Health Care Patterns, Attitudes, and Resource Utilization of a Predominantly Indigent Population in Three Communities.

Robert Allen Perkins

Louisiana State University and Agricultural & Mechanical College

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UTILIZATION OF A PREDOMINANTLY INDIGENT
POPULATION IN THREE COMMUNITIES.

The Louisiana State University and Agricultural
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HEALTH CARE PATTERNS, ATTITUDES, AND RESOURCE
UTILIZATION OF A PREDOMINANTLY INDIGENT
POPULATION IN THREE COMMUNITIES

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The Department of Sociology

by
Robert Allen Perkins
B.S., Louisiana State University, 1956
M.S.W., Louisiana State University, 1960
May, 1972

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ABSTRACT

This study represents an attempt to explore the health care patterns of persons living in predominantly indigent areas of three communities, New Roads, Hammond, and a neighborhood in South Baton Rouge. These communities were selected, because it was felt that they might represent three positions on the urbanization and industrialization continuums. One is a trade center depending on an agricultural economy and having little industry which is not farm related. A second community is somewhat larger and provides a second relevant quality. Formerly, it was a farming area and produce shipping center. At the present time, however, this city is beginning to address itself to industry. The third population source is located in an industrial, urban area.

The sample selection procedure varied slightly for each community as field adaptations had to be made to accommodate variations in population concentrations. In each instance, however, a geographic based sampling procedure was utilized which provided for a two stage sampling frame. The second stage was the family unit while the first stage was a geographic unit approximately the size of a city block.

In addressing the research problem attention was directed to the areas of perceived morbidity, health care utilization, and attitudes toward health care facilities. Each of these areas were operationalized as a dependent variable and their relationship to several selected, socio-economic characteristics was explored.

In the area of morbidity it was reasoned that, because of the interpenetration of system levels, it could be expected that disease, or a disruption of the homeostases of the organismic system level, would be accompanied by a disruption of equilibrium on the several other system levels. This proved to be the case, with gross morbidity found to be related significantly to feelings of alienation at the personality system, while at the social system level morbidity rates were found to be related significantly to incomplete family structure, position of atypical child, position of female head of household, and irregular church attendance and contribution. Finally, at the cultural-economic system level a relationship with income was determined to exist.

Health care resource utilization proved to be a complex phenomenon reflecting multiple influences. The most frequently utilized health care resource proved to be the medical doctor. However, many differences were found in the quality of the relationship between the medical doctor and various types of patients. It was also found that the decision to seek treatment from the medical doctor was not simply a function of the symptom. This decision making process was explored through factor analysis. This analysis yielded factors which were compatible with the possibility of multiple system level influences on the decision to either go or not go to a medical doctor.

When attitudes toward public hospital and private hospital care were examined it was again found that such attitudes are not a simple function of the proprietorship of the hospital. There is some cause for concern about these attitudes, as almost 20% of the sample

responded with less than a "good" attitude toward hospital care.

Adding to this concern are the facts that the urban population and the younger age groups tended to have less positive attitudes. Both of these conditions may forebode trends which should be watched.

The absence of builtin feedback channels in the health care delivery system make such a surveillance even more imperative. In addition, the findings of this study suggest that it may be productive to explore further the relationship between individual pathologies and social structure and the decision making process. Because of the former relationship there are indications that morbidity rates can be expected to increase. The latter condition may prove to be a mechanism through which health care cost might be reduced.

CHAPTER I

THE PROBLEM AND REVIEW OF THE LITERATURE

I. THE PROBLEM

Statement of the Problem

This study represents an attempt to explore the health care patterns of the medically indigent persons in a circumscribed geographic area. Such an effort is much more complex than it might appear, for health care patterns are much more than a response to a simple equation such as:

awareness of symptom $\longrightarrow$ purchase of treatment.

The perception of symptoms as a medically significant event is not always a deterministic response to a universally held belief or to ubiquitous knowledge. It can, on occasion, be influenced by personality traits of the affected individual, by previous experiences of this individual, or by cultural nuances of reference groups to which he might belong. Additionally, before an awareness of a medically significant symptom is translated into the purchase of health care services the decision must be reconciled with a set of priorities involving other behavior making simultaneous demands on the time, energy and financial resources of the individual. Finally, once the decision to purchase health care services is made, the manner and effectiveness with which this decision is executed is, to some extent, a function of the individual's knowledge and belief systems.

The problem, then, becomes that of exploring the prevalence of diagnostic, disease categories in the medically indigent population, the perception of symptoms as it relates to various socio-economic-cultural variables, and the patterns of health care consumption as they, too, relate to these variables.

Purposes of the Study

The purposes of this study are both pragmatic and heuristic. Pragmatically, it is hoped that the findings of this study will provide the Louisiana Capital Area Health Planning Council with data that will enhance its ability to plan more effectively for the health care needs existing in the geographic area for which it has the planning responsibility. In addition, it is hoped that the study will provide insights that will lead to the development of feedback mechanisms to facilitate on going planning in the future. Heuristically, it is the intent of this study to explore illness and the response to illness as a manifestation of social structure intrinsically related to such social groups as the family, religious groups, ethnic groups, and income groupings.

Significance of the Study

The importance of health problems in contemporary society is well established. When expressed in monetary terms alone, the impact of the problem is staggering. In 1970, the national personal health care expenditure in the United States amounted to 63.7 billion dollars with 40 per cent of these funds coming from tax sources. That the problem is not one that has peaked and entered into decline can be

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seen from the fact that in 1950, the national personal health care expenditure was only 11.1 billion dollars. In 1968, it reached 49.8 billion dollars and since 1965, it has increased at a rate of 5 billion dollars annually.¹

Dollar figures do not adequately portray the true significance of the problem, however, for they ignore the social costs. Since many of the pathological conditions, especially chronic disease conditions, tend to strike middle aged and older persons they kill or disable those persons who have mastered their occupations and who are among the most productive members of society.

A 1954 survey conducted in Butler County, Pennsylvania, to discover the extent of disability in the population of this mixed urban and rural area, indicated that 16 persons per 1,000 population were disabled. The survey also revealed that a total of 141.4 man years per 1,000 population was lost because of disability with three diseases, arthritis, diabetes, and circulatory disorders accounting for almost 40 per cent of the disabilities found.²

In addition to a deterioration in their work role, disabled persons might, a priori, be assumed to suffer some liability in other social roles. It is conceivable that a father who does not adequately fulfill his role of bread winner in the home may also abdicate a part of his role in the socialization of his children or that any parent

¹H. P. Hampton, Report of Governors' Conference on Health Care Cost, Austin, Texas: Governor's Office of Comprehensive Health Planning.

²S. Graham, "Disability in Butler County," Public Health Reports, LXXI (November, 1956), pp. 115-118.

suffering from a chronic disease condition may use this condition to influence the behavior of the other members of the family. Thus, illness may influence the fundamental fabric of social control in a society.

Another quality of ill health, viewed from a sociological perspective, that adds significance to this study is the fact that populations are differentially affected by health problems. It has been empirically established that the poor are sicker than the non-poor and yet, receive fewer health services.³ This relationship, however, is more complex than it might appear, for it cannot be assumed that it is the lack of money that produces pathology or dictates an inefficient utilization of treatment resources. Culturally determined perceptions of disease or misconceptions of treatment might also influence this relationship and attitudes toward medical care can mitigate the effective utilization of health care resources.

In notable contrast to the importance of health to the social and economic welfare of our society and to the vast sums expended for health care, is the scarcity of centralized, valid health data. On the national level, the establishment of the United States National Health Survey in 1956 was a major step. Unfortunately, at the state level, death certificates remain the basic source of information, since the sample used in the national survey is too small for reliable

³William C. Richardson, "Poverty, Illness, and Use of Health Services in the United States," Hospitals, Journal of the American Hospital Association, XLIII (July 1, 1969), p. 34.

measures of illness and disability.⁴ However, there are many pathological conditions that do not result in death. Consequently, mortality data provide only a partial and biased portrayal of morbidity trends and distributions.

This condition produces grievous problems in planning for adequate health services for any population. Yet the unremitting rise in health care costs dictates that comprehensive health care planning must become a reality. It is this paradox that provided the stimulation to undertake this project to gain a better understanding of the perceived health needs, patterns of health care, and attitudes toward health care in several population centers.

It is hoped that this study will provide the beginning insights required to initiate health care planning for the populations surveyed. It is also hoped that this study will provide insights into more sociologically relevant areas such as the relationship of illness and health care to social structure.

II. REVIEW OF THE LITERATURE

Attesting to the importance of health as an area of investigation is the large amount of professional and popular literature devoted to it. This literature covers a rather wide range of health related topics. In reviewing the professional literature those topics related to social epidemiology, social etiology, health care resource

⁴Thomas R. Ford, Health and Demography in Kentucky, Lexington: University of Kentucky Press, 1964, p. 102.

utilization, and methods of approach were given particular attention.

Social Epidemiology

In considering the epidemiology of illness, attention must be directed to an interesting question. That is, what conditions are to be considered pathological. There is evidence that conditions considered pathological by some groups are accepted as normal by other groups. For example, dyschromic spirochetosis, a disease characterized by spots of various colors that appear on the skin, is so common in a particular South American tribe that indians who do not have them are regarded as abnormal and are even excluded from marriage.⁵ Mechanic points out that a wide variety of diseases are not defined by particular groups as illness conditions because they occur frequently and are regarded as the common state of man. In some countries, the obese woman is an object of envy and desire. Other groups define obesity as a physical and emotional disease. In some societies supernatural powers are attributed to the epileptic, while in others, the epileptic is not only regarded as ill, but also as the object of scorn and social prejudice.⁶

Parsons suggests that society may determine, to some extent, the conditions to be considered pathological.⁷ This position is

⁵Rene Dubos, Man Adapting, New Haven: Yale University Press, 1965, p. 251.

⁶David Mechanic, Medical Sociology, New York: Free Press of Glencoe, 1968, pp. 16-17.

⁷Talcott Parsons, "Definitions of Health and Illness in the Light of American Values and Social Structure," in E. G. Jaco, ed., Patients, Physicians, and Illness, New York: The Free Press of Glencoe, 1958, p.186.

supported by Zborowski who attempts to specify varying culture orientations to pain among persons in different ethnic groups. He notes that Italians have a present-oriented apprehension with regard to the actual experience of pain, while Jews show a future-oriented anxiety as to the meaning of the pain experienced. Further, he notes that Jewish and Italian culture allow for free expression of feeling and emotions, while "Old American" patients try to take a detached and unemotional view of their symptoms.⁸

Some observers claim that the poor perceive more episodes as nonserious than do the nonpoor. This suggests that the perceptual threshold, beyond which an event is judged to be a symptom, is higher in the poor than in other classes. It is Kosa's opinion that this might be true in the case of medically unsophisticated people, but that the present-day American poor, particularly the urban poor, cannot be characterized with such a lack of sophistication. Moreover, he points out that the observed differences in the morbidity of social classes show up in the serious illnesses where the likelihood that a symptom would not reach the perceptual threshold is greatly diminished by the nature of the illness.⁹

Accepting the fact that the apparent difference in the distribution of illness among social groups may be inflated by nuances in

⁸M. Zborowski, "Cultural Components in Responses to Pain," *Journal of Social Issues*, VIII, #4 (1952), 16-30.

⁹John Kosa et al., "Health and Poverty Reconsidered," in John Kosa et al., eds. Poverty and Health: A Sociological Analysis, Cambridge: Harvard University Press, 1969, p. 321.

perception of illness there remains the propensity for some populations to be afflicted by disease to a greater extent than others. Early studies in France demonstrated that mortality rates in that nation were closely linked to the living conditions of the different social classes and revealed a clear relationship between poverty and disease.^{10,11}

Sydenstricker reported an earlier study completed in 1924, in the United States in which Emmet classified the members of a workmans' sick and death benefit fund into broad occupational classes that were really differentiated according to economic status, and computed temporary sickness and accident rates for each. A consistent and definite association of disability with poor economic status was shown.¹²

A more recent study, utilizing data from the National Center for Health Statistics for the fiscal year 1965, explored the relationship of income and both acute and chronic illnesses for all age groups. The findings relative to chronic, activity limiting conditions were impressive, revealing that the low income family members experienced a higher rate of such chronic conditions in all age categories.¹³

¹⁰Rene Villermé, "Mémoires sur la mortalité en France, dans la classe aisée et dans la classe indigente," *Mémoires de l'Académie royale de Médecine*, I (1828), 51-99.

¹¹Rene Villermé, "De la mortalité dans les divers quartiers de la ville de Paris," *Annales d'hygiène publique*, III (1830), 294-341.

¹²Edgar Sydenstricker, Health and Environment, New York: McGraw-Hill Book Company, Inc., 1933, p. 85.

¹³William C. Richardson, "Poverty, Illness, and Use of Health Services in the United States," Hospitals, Journal of the American Hospital Association, XLII (July 1, 1969), 34.

While it appears incontestable that gross illness rates are higher in lower socio-economic groups there is evidence in the literature that there may be some specificity of illness to socio-economic class with certain illnesses appearing more frequently in specific social classes. For example, the lowest social classes have the highest rates of severe psychiatric disorder in our society.¹⁴

In physical health the social distribution of morbidity shows some diseases to be more prevalent in the wealthier classes. Among these diseases are coronary problems and lung cancer. Other diseases, such as contagious diseases and diseases resulting in infant mortality, are known to be more prevalent in the poverty classes.

There is no discernible sign that the morbidity gap between the poor and non-poor is narrowing in the field of mental health. The question of the morbidity gap in physical health, however, is more complex. There is no question that differences among social classes above the poverty line have narrowed considerably. There is strong evidence, too, that in those disease areas which are open to control by public health measures the poor are not as relatively disadvantaged as they once were.¹⁵

A review of the literature also brings out that the distribution of illness in society is characterized by differential prevalence in categories other than social class. Calabresi found differences in the

¹⁴John Kosa et al., Op. cit., p. 321.

¹⁵Ibid.

pneumonia, tuberculosis, heart disease, and diabetes rates among Irish, Italians, Germans, British, Canadians, and Poles in the United States.¹⁶ Smith found differences in the frequency with which persons of different national background in America are afflicted with cancer at various sites.¹⁷ Emerson, exploring rates of communicable diseases found variation in prevalence among different nationality groups¹⁸ while Aycock and Hawkins report a similar relationship with leprosy.¹⁹

The most frequently reported disease in our society, heart disease, has yielded reluctantly to sociological investigation. Incidence, the number of new cases occurring at a given time, is very difficult to determine. Consequently, prevalence rates, the number of cases current in a population at a given time, are usually the unit of inquiry. Low prevalence rates may reflect high mortality rates from an illness rather than low incidence rates. However, the few studies made of ethnic background as related to prevalence of heart disease offer some interesting insights. One study concluded that Jews have a

¹⁶Massimo Calabresi, "The Relation of Country of Origin to Mortality for Various Causes in New York State," Human Biology, XVII (1945), 340-65.

¹⁷F. R. Smith, "Nationality and Carcinoma of the Cervix," American Journal of Obstetrics and Gynecology, XLI (March, 1941), 424-30.

¹⁸Haven Emerson, "Significant Differences in Racial Susceptibility to Measles, Diphtheria, and Scarlet Fever: Statistical Study of Case Incidence and Deaths Among Treatment Dwellers in New York City, 1921-1925, Inclusive," Journal of Preventive Medicine, V (September, 1931), 317-50.

¹⁹W. L. Aycock and J. W. Hawkins, "Regional, Racial and Familial Relationships in Leprosy in the United States," Public Health Reports, LVI (June, 1941), 1323-36.

higher prevalence of coronary artery disease than do Italians²⁰ while Sauer found that the Irish and Russians (native born) also have high mortality rates from the disease.²¹

Saxon Graham reported a study in which an attempt was made to determine whether first generation ethnic groups were more disease prone than subsequent generations of the same ethnic groups. It was reasoned that the first generation members would tend to be "marginal men" especially prone to tensions in assimilation. It was found that the disease rates for rheumatism, arthritis, high blood pressure and diabetes showed a relatively low rate in the first generation, a sharp increase in the second and a decline in subsequent generations. Heart disease and hernia rates were found to increase with the number of generations in the United States. Only hardening of the arteries reached its highest incidence in the first generation.²²

Social Etiology

Having established the fact that there is a positive correlation between disease and various socio-economic conditions, the question of causation arises. Do these socio-economic conditions cause

²⁰Frederick H. Epstein, et al., "The Epidemiology of Atherosclerosis among a Random Sample of Clothing Workers of Different Ethnic Origins in New York City, I," Journal of Chronic Disease, V (September, 1957), 300-28.

²¹Herbert I. Sauer, "Epidemiology of A Cardiovascular Mortality - Geographic and Ethnic," American Journal of Public Health, LII (January, 1962), 94-105.

²²Saxon Graham, "Ethnic Background and Illness in a Pennsylvania County," Social Problems, IV (July, 1956), 76-82.

or contribute to the cause of the diseases with which they are associated? Earlier, single causation theories, that developed following the discovery of the important role played by microorganisms in many diseases made it difficult to attribute disease causation to socio-economic factors. Now, however, it is generally accepted that microorganisms may not be a sufficient cause even of the infectious diseases. A case in point is the common "fever blister" or "cold sore." This condition results from the herpes simplex virus. However, it is known that this virus infects the individual very early in life and remains within the individual throughout his life time. Yet, lesions do not occur unless certain other conditions first occur, upsetting the chemical balance of the body. These other conditions may include over-exposure to ultraviolet light, infection with the common cold or emotional stress. The herpes virus, then, is a necessary but not a sufficient cause of the "fever blister."

Obviously, for socio-economic experiences to influence health, there must exist some bridging mechanism between them and the physiological systems of the individual. When the socio-economic experience resembles that of the match workers, studies by Roussel,²³ in which the pathological condition, phosphorus necrosis, was directly traceable to working conditions, it is not difficult to see the influence that the social condition has on the physiological systems.

In many instances, where the relationship between the two is

²³George Rosen, "The Evolution of Social Medicine," In Howard E. Freeman, et al., (eds.), Handbook of Medical Sociology, Englewood Cliffs: Prentice-Hall, Inc., 1963, p. 33.

not so striking, it is more difficult to understand the bridging mechanism. The body's communication systems may provide this function. There are two major systems of communication in the body, the nervous system and the endocrine system. While the major characteristic of the nervous system lies in its ability to communicate complex messages with great alacrity and precision, the importance of the various endocrine systems lies in their pervasive influence upon many basic metabolic processes and upon the functioning of particular organ systems. These two systems do not operate independently of each other. Recent work has indicated that endocrine systems, rather than being entirely under the control of internal feedback mechanisms, can be influenced by the activity of the central nervous system as well.

It is conceivable, then, that socio-economic conditions producing an effect on the central nervous system may have this effect transferred to the endocrine system and, thus, exert a control on the body's physiologic systems. Research conducted by Handlon²⁴ seemingly bears this out. In this research a group of students, faced with both financial and academic problems, were tested periodically for qualities of euphoria and dysphoria. Their urine was also tested periodically for 17-hydroxy corticosteroids, a product related to stress. It was found that the urine level of this compound did change with emotional change and also tended to be related to the social backgrounds of the students.

²⁴Joseph H. Handlon, "Hormonal Activity and Individual Responses to Stresses and Easements in Everyday Living," in R. Roessler and N. Greenfield, eds., Physiological Correlates of Psychological Disorder, Madison: The University of Wisconsin Press, 1962, pp. 157-70.

If this relationship does exist it suggests that social conditions producing prolonged stress are potentially pathogenic. One complicating factor in exploring this possibility is the lack of precision in the definition of the term "stress." This term has been used to refer to a situation which causes people to react as though they have been threatened. At times, it has been used to characterize physical, social, and cultural conditions likely to be upsetting to the average person. Such conditions would include battle conditions, impending surgery, rapid cultural or social change, anomie, and a variety of life crises. When used in this way, the designation of certain circumstances as stress situations is based on assumption. The term stress is also used to refer to the emotional response to stressful situations. Thus, various emotions such as anxiety, fear, depression, and general discomfort are frequently referred to as stress. Mechanic suggests that it is useful to conceive of stress as characterizing a discrepancy between the demands impinging on a person--whether these demands be external or internal, whether challenges or goals--and the individual's potential responses to these demands.²⁵ From this perspective, stress can be thought of as an interaction between a situation and an individual's capacity to meet the situation.

Assuming that stress is related to social situations, it follows that it must be, at least partially, a function of social organization. If this is true and if it is also true that prolonged stress is

²⁵David Mechanic, Medical Sociology, New York: Free Press of Glencoe, 1968, p. 301.

pathogenic, there should be a relationship between types of social organization and disease. More specifically, stress producing social structure should exhibit some degree of pathogenesis while stress inhibiting social structure should generate some degree of prophylaxis.

There is some indication in the literature that such a relationship does obtain. Durkheim successfully demonstrated a positive relationship between suicide and anomie.²⁶ Actually, this relationship had been suggested earlier by de Boismont.²⁷ Horton found a positive correlation between the level of anxiety in a society and the rate of alcoholism and it has also been found that in the United States the rate of alcoholism is significantly higher in urban areas than in rural. Indeed, the rate of increase in alcoholism in the United States more nearly approximates the rate of urbanization than any other single parameter.²⁸ If we assume that the urban social structure is characterized by a relatively greater condition of anomie than the rural area, Horton's findings are not at all inconsistent with Durkheim's.

Anomie may be produced by the larger society and it is probably in this perspective that we tend to think of the concept. The

²⁶Emile Durkheim, Suicide, A Study in Sociology, translated by John A. Spaulding and George Simpson, Glencoe: Free Press, 1951.

²⁷Brierre de Boismont, "De l'influence de la civilization sur le suicide," Annales d'hygiene publique (1835)

²⁸Peter B. Field, "A New Cross-cultural Study of Drunkenness," and John R. Seeley, "The Ecology of Alcoholism: A Beginning," in David J. Pittman and Charles R. Snyder (eds.), Society, Culture, and Drinking Patterns, New York: John Wiley and Sons, Inc., 1962, pp. 48-74 and 330-44.

interpenetration of systems, however, dictates that if it exists on the societal level it must have its correlates at the lower system levels such as the family and even at the level of the personality system. It may exist at this latter level in a circumscribed number of people without emerging into the societal level. Individuals who experience geographic relocation and remain marginal to the new social structure may experience a higher degree of anomie than that characteristic of the larger society. If this is true then these marginal persons may experience a higher disease rate than either those members of the new social structure or those members of their own group who did not make the migration.

Mechanic described a study that seemingly supports this possibility.²⁹ In this study, it was found that the Bantu Africans who were transported from the vicinity of Johannesburg into the outskirts of the city itself and employed in industry continued to experience the same tuberculosis morbidity rate as in the tribal villages, but the mortality rate from this disease increased greatly. This was true despite the fact that living conditions were improved. This finding is similar to one reported by Wolff, that, during the relocations of Navajo and Sioux Indians within the same climate and geographic area, the tuberculosis mortality rate greatly increased.³⁰ In still another report data are presented for a large rural population who migrated from Ireland to the United States between 1840 and the early 1900's.

²⁹David Mechanic, *op. cit.*, p. 274.

³⁰H. Wolff, Stress and Disease, Springfield, Illinois: Thomas, 1968, p. 8.

This rural population left Ireland because of severe economic stresses. They settled primarily in urban areas in the United States where economic conditions were probably better and more food was probably available than in the area that they migrated from. Yet, the tuberculosis mortality rate among those Irish in the United States was twice as high as among those who remained in Ireland.³¹

It can be shown that even in geographically stable populations social change is associated with increases in certain diseases. Halliday reported that between 1931-1936 in Scotland, during a period of serious economic depression, there was a marked increase in those illnesses lasting more than one year. Peptic ulcer increased by 130% to 140% and rheumatism increased by 50-60%.³² Dubos suggests a relationship between tuberculosis mortality and social change. He argues that the peak incidence of tuberculosis mortality occurs within ten to twenty years after industrialization has been established in a society. Thereafter, it declines sharply.³³

There is some apparent inconsistency in the findings of studies of the relationship of geographic relocation to morbidity reported in the literature. The study by S. Graham, cited earlier, indicated only hardening of the arteries tended to be over-represented

³¹David Mechanic, op. cit., p. 274.

³²D. T. Graham and I. Stevenson, "Disease as Response to Life Stress," in H. I. Lief et al., (eds.), The Psychological Basis of Medical Practice, New York: Harper and Row, 1963, p. 123.

³³Rene Dubos, Mirage of Health, New York: Harper, 1959, p. 127.

in first generation immigrant families. Several diseases, rheumatism, arthritis, high blood pressure, and diabetes, were found to have low morbidity rates in the first generation, high rates in the second generation, and successively lower rates in subsequent generations.³⁴

It has been suggested by Danish researchers that hard physical labor may be a cause of hardening of the arteries. Since it might be expected that first generation immigrants would have to work harder than upward mobile later generations, even this single high disease rate does not confirm the other studies cited. However, there is a possible explanation for the apparent inconsistency of the finding of this study. It is possible that the first generation of these immigrants brought with them their stable family structure and behavioral norms from the old country. This may have protected the migrating generation from anomie while the second generation, being exposed to conflicting norms in their socialization, may have become the marginal generation with the accompanying condition of anomie.

Although this is entirely speculation, there is some support in the literature for the assumption that stable family structure can provide some degree of immunity to certain diseases. In Norway, a community-wide study of blood pressures was conducted. It was found that unmarried women had a higher rate of hypertension than any other group of females. In addition, among married women there was an inverse relationship between the rate of hypertension and the number of

³⁴S. Graham, op. cit., p. 79.

children in the family.³⁵ In a study of tuberculosis in Seattle, Hawkins divided the city into four socio-economic districts; skid row, working class, middle class, and well-to-do. The rate of tuberculosis was determined in each. As might be expected, the highest rate was found in the skid row section. However, when a further analysis of the data was made, it was found that the morbidity rate for each race was highest in that sector where the race was in a minority, thus, experiencing a dearth of interpersonal interaction. The highest rate was found to be among the single room lodgers who lived without family.³⁶

Not all stress can be attributed to anomie. Separation can be a contributing factor and it, too, has been found to be associated with illness. Lindeman reported that bereavement preceded the onset of ulcerative colitis in 75 of 87 patients. In 56 of these instances, the bereavement was by death.³⁷ Schmale studied a group of 42 hospital patients having a wide variety of disorders and found that 41 had experienced recently an actual or threatened separation from a significant object in their lives. Seventy-five per cent of these separations had occurred within the week preceding the onset of the

³⁵Saxon Graham, "Social Factors in Relation to the Chronic Illnesses," in H. E. Freeman, et al., (eds.), Handbook of Medical Sociology, op. cit., p. 81.

³⁶N. G. Hawkins and T. H. Holmes, "Environmental Considerations in Tuberculosis: Ecologic Factors in Tuberculosis Morbidity," Transactions of the Fiftieth Anniversary Meeting of the National Tuberculosis Association, 1954, pp. 223-38.

³⁷D. T. Graham and I. Stevenson, "Disease as Response to Life Stress," op. cit., p. 118.

patient's disease and included marital separation, death of a sibling, a wife's returning to work, a failing grade on a report card, and the delayed arrival of a friend.³⁸

Social stress has also been reported in heart disease although there is some inconsistency in the findings. Vernon found emotional factors important in 83 per cent of 30 patients with congestive heart failure that he studied. Chambers and Reiser found social stresses to be precipitating events in 76% of 25 cases they studied. On the other hand, Sodeman and Burch found that emotional disturbances occurred significantly in only 2 per cent of 100 patients with congestive heart failure whom they studied and Boyer determined emotions to be a precipitating factor in only 1 patient out of 1,000 whom he examined. Graham reviewed these studies and formed the opinion that the difference in findings between these studies was due to differences in the techniques of observations and that the former techniques were better.³⁹

There are socio-economic conditions which are not stress related in the ordinary sense, but have been found to be positively associated with illness. Cultural traits such as diet, housing and sanitation have been suggested as contributing factors to illness. Since the presence of disease in an individual depends partly on his ineffectiveness in employing preventive practices, lack of knowledge of preventive measures may contribute to the morbidity rate. Supporting this contention is the fact that it has been established that the

³⁸Ibid., p. 119.

³⁹Ibid., p. 123.

education level of the mother is the most important factor in prenatal morbidity.⁴⁰

The authors of one clinical study investigated the factors found to result in overeating in 500 obese persons who requested treatment for obesity. Eight conditions were determined to have resulted in overeating among this group. These conditions included: environment, economics, monotony, occupation, organic disease, nervousness, glandular imbalance, and subconscious factors. Among these conditions the first four are clearly socio-economic.⁴¹

Despite the apparent importance of socio-economic factors in illness the interrelatedness of these factors, their stochastic nature, the absence of "necessary causes" among them, and the difficulty of establishing temporal sequences between their occurrence and the onset of disease, make it very difficult to attribute definite causation to them.

Health Care Resource Utilization

Even the role of emotions, which has often been seen as an etiological or precipitating factor in illness, has been questioned by some authorities. Mechanic and Volkart advanced the possibility that emotion, induced by stress, may be more significant in its influence on

⁴⁰John Kasa et al., "Health and Poverty Reconsidered," op. cit., p. 328.

⁴¹Albert Stunkard, "Research on a Disease: Strategies in the Study of Obesity," in R. Roessler and N. Greenfield (eds.), Physiological Correlates of Psychological Disorder, Madison, Wisconsin: The University of Wisconsin Press, 1962, p. 212.

health seeking and on the expression of illness than on the actual occurrence of the condition. They then preceded to examine this problem by an investigation of more than 600 students at a major university. A major focus of the study was the relationship between measures of "stress," and measures of illness behavior, and their joint effect on the use of medical facilities. Analysis of the data indicated that perceived stress, as measured by indices of loneliness and nervousness, and illness behavior were clearly related to the use of a college health service during a one year period. Among students with a high inclination to use medical facilities and high "stress," 73 per cent were frequent users of medical services, while among the low-inclination-low "stress" group, only 30 per cent were frequent users of such services. When illness behavior patterns were controlled statistically it was found that the influence of "stress" was somewhat different among persons with a high receptivity to medical services than among those with a low receptivity. In the high inclination group, "stress" was a rather significant factor in bringing people to the physician. The researchers felt that these data supported the interpretation that "stress" leads to an attempt to cope. Those who are inclined to adopt the patient role tend to adopt this particular method of coping more frequently than those who are not so inclined.⁴²

Rather than disprove the influence of emotions on the occurrence of disease this study seems simply to have recognized the role of stress in inducing behavior. However, an overlooked finding of this study is

⁴²David Mechanic, op. cit., p. 129.

that some people suffering the conditions of illness and stress may not be inclined to seek medical care while others may. It seems that this "inclination" may be of greater sociological relevance than is the role of "emotion." The implication is that even among a group as affluent and sophisticated as college students, the utilization of health care resources cannot be explained by the simple equation:

awareness of significant symptom $\longrightarrow$ search for diagnosis and
treatment

If the utilization of health care resources is differentially executed, the question arises whether this differential utilization is idiosyncratic or patterned.

Parsons points out that the behavior of the sick person is constrained or limited by the role expectations of the society in which he lives. According to him, in Western societies the sick role consists of two rights and two duties. The rights are exemptions from normal social responsibilities and the recognition that the ill person is not to blame for his state. The obligations are a desire to get well and to seek technically competent help to achieve that end.⁴³

This is obviously an ideal type construct and it is probably not possible to reduce illness behavior to such a simple model. Other authorities agree with the concept of the ordering of illness behavior by social influences. Anderson suggests that it is reasonable to assume that patterns of utilization are not quixotic. It appears that in different contexts there are patterns of utilization dependent on such

⁴³Talcott Parsons, The Social System, New York: The Free Press of Glencoe, Inc., 1951, p. 85.

factors as illness levels, age and sex composition of the population, presence or absence of health facilities, family income, residence, and the perceptions of providers and recipients of health services.⁴⁴

The dynamics of the patterning of health care behavior is not clearly brought out in the literature and is probably not completely understood at this time. Simmons states that the therapeutic relationship should function at its optimum where professional and patient are of the same social class.⁴⁵ This position appears compatible with studies of the psychotherapeutic relationship in the United States which indicated that the patients who most nearly approached the therapist's status were accorded the best treatment and the most sympathy.⁴⁶ Roth also affirms this position in pointing out that Negroes at any income and occupational level are less likely to have a continuing relationship with a physician than whites of the same income and occupational level. He suggests that this may result from the somewhat elusive psychological factor of social distance: the Negro at any income level may feel more distant from the white, upper-class physician than the white of the same income level, hence, the Negro tends to eschew the offices of private physicians and instead prefers the public clinics

⁴⁴Odin W. Anderson, "The Utilization of Health Services," in Howard E. Freeman et al. (ex.), Handbook of Medical Sociology, Englewood Cliffs: Prentice-Hall, Inc., 1965, pp. 349-50.

⁴⁵Ozzie Simmons, "Implications of Social Class for Public Health," Human Organization, XVI (Fall, 1957), 9.

⁴⁶F. C. Redlich, et al., "Social Class Differences in Attitudes Toward Psychiatry," American Journal of Orthopsychiatry, XXV (1955), 60-70.

where the institutional setting works to protect against the feeling of social distance.⁴⁷

In the study of Regionville there was considerable feeling on the part of lower status people that physicians did not want them as patients. However, this antagonism may, in turn, have been related to an incompatibility of values. The lower status person, getting negative sanction for exhibiting norms inconsistent with those of the professional, may have perceived this as a rejection of him as a patient. This possibility is somewhat borne out by Kosa who recognized that specific anxiety shows a variation between socio-economic classes. In the well-to-do class it tends to conform on the whole with the expectations of the medical profession, while in the poor class it tends to deviate from such expectations. This situation produces certain negative consequences for the poor. It possesses serious obstacles in the line of effective communication between the physician and the poor patient and creates difficulties in the professional treatment of the anxiety component of the poor patient's illness.⁴⁸

Anthropologists consider the cultural differences in attitudes toward the use of services to be an important factor in the utilization of health care resources.⁴⁹ This position is strengthened by a

⁴⁷Julius A. Roth, "The Treatment of the Sick," in J. Kosa, et al., Poverty and Health: A Sociological Analysis, op. cit., pp. 217-218.

⁴⁸John Kosa, et al., "Health and Poverty Reconsidered," op. cit., p. 322.

⁴⁹Lyle Saunders, Cultural Difference and Medical Care: The Care of the Spanish-Speaking People of the Southwest, New York: Russell Sage Foundation, 1954.

study indicating that positive attitudes on the part of parents toward dental care had a positive effect on their provision of dental care to their children.⁵⁰ Accepting the importance of attitudes leads immediately to the question of whether antagonistic attitudes toward medical doctors, other health professionals, and health care produce a tendency to utilize health services less. Feldman correlated attitudes toward medical doctors by a group of subjects with the number of times a doctor was seen during the previous year, controlling by a rather refined index of perceived medical needs. The resulting partial correlation approached zero. From this, he concluded that, in general, it seems that if a person recognizes that he is ill, he will generally consult a doctor no matter what he thinks of the profession as a whole.⁵¹

Regardless of the dynamics there is ample evidence in the literature of the existence of differential patterns of health care resource utilization. It has been said that there are two distinct kinds of medical service in the United States. The middle class uses physicians in private practice and the low-income class utilizes public clinics. In terms of volume the literature seems to contradict this assessment. The authors of one study relying on data obtained from the national health survey found no significant difference in the gross number of

⁵⁰Alvin L. Bertrand and Homer L. Hitt, Parental Attitudes and Dental Care for Children in Selected Rural Areas of Louisiana, Baton Rouge: Louisiana State University Press, 1948, p. 31.

⁵¹Jacob J. Feldman, "What Americans Think About Their Medical Care," Paper read at the annual meeting of the American Statistical Association, Chicago, December 27-30, 1958.

doctor visits between social classes, but did find qualitative differences. Members of families with an income of less than \$3,000.00 annually appeared to be twice as likely to see the doctor in a hospital clinic or emergency room and only one half as likely to make initial contact over the phone. The higher income group was more inclined to utilize specialists. This was most true for obstetrics-gynecology and pediatric specialties. The proportion of the high income group seeing a dentist during the previous year was three times as great as that of the low income group. Twenty-two percent of the low income group and seven percent of the high income group had never seen a dentist and the higher the income the less was the likelihood that dental visits were for extractions.⁵²

Alpert found evidence that the designation of a particular doctor as a family doctor or "regular" doctor is a function of income. When 4,320 families with children in the pediatric age group were asked whether they had a doctor who usually looked after the children, the proportion of affirmative responses increased dramatically from the lowest to the highest income group. Only 16% of the families receiving public assistance had such a doctor while 85% of the families with an income of more than \$10,000.00 per year did.⁵³

Predicated on the premise that there is basically a dichotomy

⁵²William C. Richard, "Poverty, Illness, and Use of Health Services in the United States," Hospitals, Journal of the American Hospital Association, XLIII (July 1, 1969), 34.

⁵³Joel J. Alpert et al., "Types of Families That Use an Emergency Clinic," Medical Care, VII (Jan. - Feb., 1969), 57.

in health care utilization of private physician vs. public clinic, Roth described four typical utilization patterns:

- (1) A stable relationship with a private practice physician - implying that such a physician is used for total primary care and that the public clinic is visited only at the recommendation of the usual physician.
- (2) An unstable relationship with a private physician - implying that such a physician is named and is used intermittantly with a public clinic.
- (3) A stable relationship with a clinic - implying that the family uses one public clinic and approaches other sources of medical care only occasionally.
- (4) An unstable relationship with a clinic - implying that the family uses several public clinics, indiscriminately, without a discernable pattern, and presumably in accordance with monetary convenience.

Comparing these utilization patterns with income, Roth found that the highest socio-economic status group tended to have stable physician relationships. The status of the group decreased for each of the utilization patterns reaching the lowest level among those who have unstable relationships with a clinic.⁵⁴

Roth's paradigm overly simplifies health care utilization reducing its value in examining the wide range of behavior appropriately considered to fall into this category. Actually, patients use a variety of medical services and each type of service may have a different pattern of utilization by each social class, age category, ethnic group or any number of other population attributes.

As an example, it is rather widely accepted that the lower

⁵⁴ Julius A. Roth, "The Treatment of the Sick," op. cit., p. 222.

socio-economic classes are "present oriented." If this quality is carried over into health care utilization, it would be expected that the lower socio-economic groups would tend to underutilize future oriented medical services such as programs of prevention. The literature suggests that this is the case. In fact, one of the earliest utilization studies reported was an effort to determine why the working class population and the peasants did not readily accept vaccination against smallpox in France.⁵⁵ This study has a contemporary American counterpart in an effort to explore the relationship of socio-economic status to participation in a poliomyelitis vaccine trial. In this study of a random sample of 160 mothers of second grade children in five public schools, a clear relationship was found between socio-economic status and participation in the trial. The reason for participation or non-participation did not vary significantly between classes.⁵⁶

Although income can be expected to be an important variable in determining patterns of health care utilization the fact that the services offered in the above studies were without cost dictates that income cannot be the determining factor in all cases. An additional

⁵⁵Annuaire des cig de 'partments de l'ancienne Normandie. caen: 1835. Reviewed in Annales d'hygiene publique (1835), p. 233.

⁵⁶Leila C. Deasy, "Socio-economic Status and Participation in the Poliomyelitis Vaccine Trial," in D. Apple, ed., Sociological Studies of Health and Sickness, New York: McGraw-Hill Book Company, Inc., 1960, pp. 15-24.

study revealed that low income groups failed to take advantage of free, conveniently located specialty clinics for emotional problems also.⁵⁷

Health care resource utilization must be complex and any effort directed toward developing a utilization paradigm must accommodate this complexity. Zola made an initial attempt in this direction when he delineated five tuning "triggers" in patients' decisions to seek medical care. These "triggers" are:

1. Interpersonal crisis: the situation calls attention to the symptoms and causes the patient to dwell on them.
2. Social Interference: the symptoms do not change, but come to threaten a valued social activity.
3. The presence of sanctioning: the person is told to seek care.
4. Perceived threat.
5. Nature and quality of the symptoms: symptoms are related to previous experiences or to those of friends.⁵⁸

Mechanic suggests a more detailed model of the help-seeking process. His model is composed of ten conditions as follows:

1. Visibility recognizability, or perceptual salience of deviant signs and symptoms.
2. The extent to which the symptoms are perceived as serious. That is, the person's estimate of the present and future possibilities of danger.
3. The extent to which symptoms disrupt family, work, and other social activities.

⁵⁷John Kosa, et al., "Crisis and stress in Family Life," Wisconsin Sociologist, IV (Summer, 1965), 11-19.

⁵⁸I. Zola, "Illness Behavior of the Working Class," in A. Shostak and W. Gomberg (eds.), Blue-Color World: Studies of the American Worker, Englewood Cliffs: Prentice-Hall, pp. 353-54.

4. The frequency of the appearance of the deviant signs or symptoms, their persistence, or their frequency of recurrence.
5. The tolerance threshold of those who are exposed to and evaluate the deviant signs and symptoms.
6. Available information, knowledge, and cultural assumptions and understandings of the evaluator.
7. Basic needs which lead to autistic psychological processes. (i.e., perceptual processes that distort reality).
8. Needs competing with illness responses.
9. Competing possible interpretations that can be assigned to the symptoms once they are recognized.
10. Availability of treatment resources, physical proximity, and psychological and monetary costs of taking action (included are not only physical distance and costs of time, money, and effort, but also such costs as stigma, social distance, feelings of humiliation, and the like).⁵⁹

This is a rather comprehensive coverage of those factors affecting health care utilization. It includes personality factors as well as social, economic, and cultural factors. However, this complexity also makes the operationalization of this model difficult. One distinct advantage of this model is that it incorporates aspects of the delivery system. While the nature of the delivery system can be expected to influence the utilization of health services the literature does not contain a great deal of information in this area. Some attention has been directed to the differential utilization associated with different prepayment plans. In regard to this quality of the delivery system, Health Information Foundation and National Opinion Research

⁵⁹David Mechanic, op. cit., pp. 130-31.

Center surveyed two populations in the same area that were enrolled in different comprehensive physicians' service plans. One of the plans was based on group practice methods and the other on traditional free choice of physician and fee-for-service method of payment. Both consulted physicians at an equal rate although there was a difference in the rate of hospital admissions.⁶⁰ Thus, when alternative forms of health care were available at the same cost to a population there was a difference in the pattern of utilization.

Summary

Health and health care behavior, both on the part of consumers and providers, are vitally important to contemporary society and have probably been so since the beginning of society. Any collection of behaviors that has endured for such an extended length of time in such a prominent position can be expected to have achieved an intricate interpenetration into a wide range of social, economic, and cultural systems.

This interpenetration results in a strong bilateral influence between illness and health care behavior and those systems into which they have interpenetrated. Studies suggest that cultural systems determine, to some extent, those conditions to be considered pathological as well as many of the habits, such as eating, that might increase

⁶⁰Odin W. Anderson and Paul B. Sheatsley, Comprehensive Medical Insurance - A Study of Costs, Use, and Attitudes Under Two Plans, Health Information Foundation Research Series No. 9, New York: Health Information Foundation, 1959.

susceptibility to some diseases. Social systems at various levels prescribe and constrain sickness behavior. In addition, to the extent that social systems influence anomie and other stress producing conditions, they contribute to one of the established causes of some disease. Each of these several systems influence health care resource utilization and there are also epidemiological relationships within each of these sets of systems.

To explore these complex relationships is difficult and cannot be accomplished effectively without the guidance of a theoretical frame of reference and the utilization of a variety of variables and statistical techniques.

CHAPTER II

GENERAL SOCIOLOGICAL FRAMEWORK AND METHODOLOGY

I. GENERAL SOCIOLOGICAL FRAMEWORK

Medical Sociology

The complexity of the problem being explored in this study makes it improbable that the immediate findings exhaust the knowledge potential of the data. If this knowledge potential is to be maximally exploited it is necessary to relate these data, along with relationships that have been determined to exist among them, to a more fundamental theoretical framework.

An obviously appropriate theoretical framework to relate these types of data to is that of medical sociology. Unfortunately, this cannot be done without encountering some difficulty because of the present nature of the field of medical sociology. McIntire defines this field as:

the science of the social phenomena of the physicians themselves as a class apart and separate; and the science which investigates the laws regulating the relations between the medical profession and human society as a whole; treating of the structure of both, how the present conditions came about, what progress civilization has affected and indeed everything relating to the subject.¹

Since this definition was formulated the sociology of health and medical care has experienced a remarkable growth. The field has

¹Charles McIntire, "The Importance of the Study of Medical Sociology," Bulletin American Academy of Medicine, I (February, 1894), 425-34.

become formally designated and systematically elaborated in the past two decades. However, medical sociology has not become analytically defined. It must be regarded as a loosely interrelated collection of investigations in which many of the theories and findings of sociology are applied to the specific problems of health and medical practice. Viewed from this perspective, medical sociology offers neither a unified definition nor a distinctive theoretical focus. In fact, theory in medical sociology is at present only in a very rudimentary stage of development.² Obviously, when viewed in the context of the larger body of sociological theory, medical sociology does not constitute a completely discrete subset of knowledge nor does it provide long range theory to which to relate empirical findings.

Consequently, the conceptual framework of this study also incorporates concepts indigenous to other areas of sociological knowledge. Social organization is one such area. The review of the literature revealed that health care behavior, including perception of illness and acting out the sick role, are basically determined by social and cultural norms. In addition it appears that the existence of some types of disease is, at least partially, related to a breakdown in social system structure at the family as well as at the societal levels.

Social Organization

This study is an attempt by the writer to approach illness and

²Neil J. Smelser and James A. Davis, eds., Sociology, Englewood Cliffs: New Jersey, Prentice-Hall, Inc., 1969, pp. 94-95.

illness behavior as aspects of social structure and, to the extent possible, from a system perspective. One advantage of using a systems approach in examining social structure is that it provides a set-subset type of relationship. Such an approach has been employed effectively in other disciplines. Examples of this are the solar system in astronomy and the various system concepts in biology. Essentially, the basic assumption in the system concept is that within the universe of data there are certain subgroups which bear a stronger relationship among themselves than they do to other data in the universe. In social systems the data universe consists of social facts and more specifically of social interactional facts; that is, in all of the social interaction occurring there are groupings in which the interacting elements are significantly more strongly related to each other than they are to elements outside of the group.

Despite the apparent, potential advantages offered by social system theory, there are disadvantages also. Not the least of these is the fact that social system theory is not yet a fully matured body of theory. Walter Buckley³ mentions the importance to sociology of three system models: the mechanical, the organic model and the process model. The mechanical model originated in the "social physics" of the 17th century in which man was regarded as a physical object whose actions and psychic processes could be analyzed in terms of the principles of mechanics. By the 19th century, Pareto had forged a concept

³Walter Buckley, Sociology and Modern Systems Theory, Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967, p. 384.

of systems from this knowledge base. This mechanical model embraced the idea of a group of elements in mutual interrelations resulting in a state of equilibrium. Moderate changes in these elements or their interactions away from the equilibrium position are counterbalanced by changes tending to restore it. This conception is reflected to a large degree in the ideas of Burckhardt, Sorokin, Zaniecki, Lewin, Homans and Parsons. Central to this model is a mechanistic type of equilibrium. It is this equilibrium which is perhaps the most vulnerable aspect of the mechanistic model, as its rigid nature does not permit an explanation of the constant change that occurs in social structure.

Serious scientific usage of organic analogizing is usually traced back to Herbert Spencer. Similar to the rise of the mechanistic model in an era of physical science advances, the organic model of society was inspired by the advances in biology. In biological systems the static connotations of equilibrium give way. Substituted is the term "homeostasis" to bring out the dynamic processual, potential-maintaining properties of basically unstable physiological systems. Thus, system models constructed on organic foundations offer a more viable concept to accommodate to notions of change.⁴

It is argued, however, that even the extension of the equilibrium concept is not sufficient to account for the type of system maintenance activity occurring in social structure. In this respect, Karl Deutsch observes that homeostasis is not a broad enough concept to

⁴Karl W. Deutsch, in Toward a Unified Theory of Human Behavior, ed. Roy Grinker, New York: Basic Books, Inc., 1956, pp. 161-62.

describe either the internal restructuring of learning systems or the combinational findings of the solutions. It is too narrow a concept because it is change rather than stability which we must account for.

This handicap is not as pronounced in the "process" model. This model was a predominate point of view in American sociology of the early twentieth century. In essence, the process model typically views society as a complex, multifaceted fluid interplay of widely varying degrees and intensities of association and disassociation. The "structure" is an abstract construct, not something distinct from the ongoing interactive process, but rather a temporary accommodative representation of it at any one time. These considerations lead to the fundamental insight that sociocultural systems are inherently structure--elaborating and changing. Societies and groups continually shift their structures as adaptations to internal or external conditions are required. Process, then, focuses on the actions and interactions of the components of an ongoing system, such that varying degrees of structuring arise, persist, dissolve, or change.⁵

This brief summary of three types of system models does not exhaust the possible types. It does serve to demonstrate that system theory is not a unified body of theory. In the face of this condition, this study takes an eclectic approach and draws from the several orientations of system theory. It is recognized that there are various levels of systems involving people. Among these are the organismic

⁵Buckley, op. cit.

system level, the personality system level, the social system level, and the cultural system level.

Illness and the concomitant health care behavior exist at each of the several levels of systems. However, it is the social system and cultural system levels which have the greatest relevance for this study. Although there is no categorical typology of social systems it is obvious that they, too, exist at different levels of complexity each with unique characteristics. All may have a common, basic, bonding mechanism accounting for their stable quality. Many explanations have been advanced for this mechanism. Smith, Spencer, Marx and Durkheim suggest the division of labor in society as the quality tending to produce this solidarity.

Durkheim observed that difference, as well as likeness, can be a cause of mutual attraction. However, certain differences do not produce this effect. We do not find pleasure in those completely different from us. Spendthrifts do not seek the company of misers, nor moral and honest people that of hypocrites and pretenders. Only certain kinds of differences attract each other. They are those which, instead of opposing and excluding, complement each other. As richly endowed as we may be, we always lack something, and the best of us realize our own insufficiency. That is why we seek in our friends the qualities that we lack, since in joining with them, we participate in some measure in their nature and thus, feel less incomplete. So it is that small friendly associations are formed wherein each one plays a role conformable to his character, where there is a true exchange of services.

We are thus, led to consider the division of labor in a new light. In this instance, the economic services are insignificant compared to the morale effect that it produces, and its true function is to create in two or more persons a feeling of solidarity. In whatever manner the result is obtained, its aim is to cause coherence among friends and to stamp them with its seal.⁶

It was further observed by Durkheim that, although the conjugal group requires a certain harmony of thought and sentiment, it is not the similarity that imparts to this relationship its peculiar character and energy. It is, instead, the sexual division of labor that provides the source of conjugal solidarity.⁷ This solidarity based on a division of labor resembles that of higher order animals in which each organ has its special physiognomy, its autonomy. Because of this analogy, Durkheim refers to this type of solidarity as organic.⁸

Herbert Spencer also compares the division of labor or of function in social structure to the specialization of function in a living organism. According to him as social structure grows its parts become unlike producing an increase of structure. This produces a progressive differentiation of social functions in which the functions are not simply different, but their differences are related in such a way as to make one another possible. This reciprocal aid causes mutual dependence of the parts. In turn, the mutually-dependent parts, living

⁶Emile Durkheim, The Division of Labor in Society, Translated by George Simpson, New York: The Free Press, 1933, pp. 54-56.

⁷Ibid.

⁸Ibid., pp. 130-31.

by and for one another, form an aggregate constituted on the same general principles as in an individual organism.⁹ Although Spencer established his organic analogy and consequent coherence of function at the societal level, there is ample evidence that he considered this quality ubiquitous to all but the most primitive social structure.

In order to place illness and health care behavior in some sort of perspective to social structure it is necessary to make some assumptions reconciling these several concepts. If it is assumed that social structure is made up of social systems and that these social systems are composed of differentiated, integrated, interdependent parts whose composite functioning accomplishes the vital functions required to sustain the system, it remains to articulate these assumptions into some type of model that captures the dynamics of system interaction.

Several types of such models exist, including Loomis' P.A.S. model and Parsons' scheme of functional imperatives. Loomis' P.A.S. model is more appropriate to a macro level of analysis while the functional imperatives when not used along with some other structural quality lacks applicability to individuals. This latter characteristic is an essential requirement for this study. In fact, two tasks are required for the structural model used in this study. First, it must account for the patterning of relationships between culturally defined structural units including norms, roles, and status-positions.

⁹Herbert Spencer, The Principles of Sociology. New York: D. Appleton and Co., 1898, Vol. II.

Secondly, since such concepts enter the cultural structure only after first originating in the interactional arena of social organization, the model must also be able to account for structuring patterns that have not yet become a part of the cultural structure.

Unfortunately, a single model possessing both of these features apparently is not readily available. Consequently, two system models are relied upon. One of these is a modification of a cybernetic type described by Holder.¹⁰ This model is diagrammed in figure 1, depicting a four member social system. The greatest modification in this model is the inclusion of three social system monitors, the cultural system monitor, the personality system monitor, and the organismic system monitor.

These three system concepts have been somewhat loosely drawn from Parsons.¹¹ The organismic system exists at the level of the various cells, tissues, and organs of the body. Together they form a system whose vital functions must be achieved if it is to endure. Since its existence is prerequisite to the survival of a social system there must be a compatibility in their functions. This can only occur if the social system is sensitive to the outputs of the organismic system. Together with the personality system the organismic system

¹⁰Harold D. Holder, "Evaluation Methods and Dynamics in Program Planning," (Source unknown-reprint on file at the L.S.U. School of Social Welfare), p. 36.

¹¹Robin M. Williams, "The Sociological Theory of Talcott Parsons," in Max Black (ed.), The Social Theories of Talcott Parsons: A Critical Examination, Englewood Cliffs: Prentice-Hall, Inc., 1961, pp. 69-72.

FIGURE 1
FOUR MEMBER SOCIAL SYSTEM

helps to determine the need predisposition of the members of the social system. The personality system is a higher level emergence than the organismic system and represents the addition of the individual's mental processes. The cultural system actually represents a higher level system which emerges from the interaction occurring in the social system. As the interacting individuals in a social system begin to evolve rules and norms representing the ideal behavior, the resulting blueprint of behavior represents the emergence of the cultural system. The cultural system then exists in the artifacts that express it as well as in the minds of individuals. It influences the system in two ways, then. Existing in the minds of the individual, the cultural system contributes to the need predisposition of individuals influencing their interaction. Since these individuals are members of multiple systems and the introjected cultural norms are carried with them from system to system they at times represent an inclusion of exogenous content into the system. However, cultural norms are also transmitted through cultural artifacts such as literature, journalism, plays, and broadcasts as well as by the reporting of court decisions. Such transmissions are picked up by the cultural system monitor and brought into the system.

Since a social system is composed of people as well as artifacts and resources its component parts must be similarly constituted. These individuals must be ordered into the required system components and status-positions and roles must be assigned or negotiated. Among the components apparently necessary to a social system are a system external

monitor, a system internal monitor, and an activity implementing subsystem. The system external monitor scans, evaluates and selectively admits inputs from the environment. These inputs may be data, knowledge, skills, capital, equipment or services. The system internal monitor determines when these resources are to be used in system activity as well as the adequacy of system activity. This latter determination is made partly from a comparison of the output of the activity implementing subsystem with some predetermined goal. This constitutes an internal feedback loop. The assessment of the adequacy of system activity is also made partly from data channeled into the system through the external monitor, constituting an external feedback loop. The activity implementing subsystem produces the output of the system. However, not all the output actually leaves the system. Some is channeled back into the system internal monitor. Other output of this subsystem is directed toward the other system components and might be regarded as expressive or system maintenance activity while that directed outside the system can be regarded as instrumental activity.

In final analysis, it is not the individuals, but the functions that are ordered in a social system. Since these functions must be performed by people then the people, too, must be ordered. Ordinarily, the positioning of system members into the various subsystems is accomplished largely through the cultural structure with its normative prescriptions but norms such as internal or external system monitoring are not visibly articulated in the cultural structure. Therefore, the

negotiation for status-positions and roles in the cybernetic system structure is probably partly determined by the individuals' need pre-dispositions and is accomplished through the sanctioning process, apparently often without conscious intent.

Most social system structure is more visible, with norms rooted in the cultural structure achieving a high degree of institutionalization through the processes of validation and legitimation. The family is an example of such a visible, institutionalized social system. The positions of mother, father, son, and daughter are relatively well defined containing culturally articulated norms. This does not mean that such a system is completely free of stress, however, as there appears to be a permanent process of disorganization in every system.¹² There are many reasons for this condition. Among some of those which have been recognized are the facts that no single individual perceives or interprets the situation the same as do others and the socialization process, which accounts for the transmission of norms from the cultural structure to the personality system, is not a monolithic process. Instead, it is accomplished through a wide range of agents which frequently describe identical social roles and positions differently.

Consequently, even after social structural units achieve validation and legitimation in the cultural structure they remain less than precise and an individual's impression of such structural units varies with the particular socializing agents to which he has greatest exposure.

¹²Alvin L. Bertrand, "The Stress-Strain Element of Social Systems: A Micro Theory of Conflict and Change," Social Forces, Vol. XLII (October, 1963), 1-9.

One other significant source of stress in social structure has relevance to this research. This results from the fact that the legitimated, culturally articulated system structure and the less visible, emergent, cybernetic system structure must exist simultaneously and be reconciled to each other. A complication is produced by the fact that there is not a one to one correspondence between the status-positions in the legitimated system and the cybernetic functions. There does appear to be a possibility that particular individuals tend to specialize in certain types of functions, as Bales determined that there was a tendency for social-emotional specialists and instrumental specialists to evolve in problem solving groups that he observed.¹³ This tendency toward specialization of function is extended to the sexual roles by Parsons who points out that in the family the adult male tends to perform instrumental functions and the adult female tends to perform expressive functions and through the socialization process this division of function is communicated to the children forming their prototype of social organization.¹⁴

Of the many obvious sources and types of stress existing in social structure the particular manifestation of relevance to this study is those several conditions that have been defined as anomie. Durkheim envisioned this condition as a breakdown in social norms

¹³Robert A. Bales, Interaction Process Analysis: A Method for the Study of Small Groups, Cambridge, Mass.: Addison-Wesley, 1949.

¹⁴Talcott Parsons and Robert F. Bales, Family, Socialization and Interaction Process, New York: The Free Press, 1955, pp. 74-94 and 113.

especially in a manner that produces a visible gap between individuals' aspirations and their achievement.¹⁵ This condition approaches the limit in the expanding economy of an open society where the state of crisis and anomie is constant. MacIver interprets anomie somewhat differently, defining it as "the breakdown of the individual's sense of attachment to society."¹⁶ This ego centered definition of anomie is also embraced by Lasswell who describes the condition as a lack of identification on the part of the primary ego of the individual with a 'self' that includes others. He observed that modern man appears to be suffering from psychi isolation, feeling alone, cut off, unwanted, unloved, and unvalued.¹⁷

A high level of anomie appears to be characteristic of an open class, industrial society such as we have in the United States. Within this frame of reference, however, anomie can be expected to be differentially related to reference social structures. It would be expected that population groups presenting a dearth of reference group memberships would tend to have a higher level of anomie than those having an abundance of such memberships. Rural populations might be expected to have a lower level than urban populations and geographic stable populations would seem to be less vulnerable to anomie than nomadic persons.

¹⁵Emile Durkheim, Le Suicide: Etude de Sociology (Paris: Alcan, 1897). Translated by John A. Spaulding and George Simpson in Suicide, New York: The Free Press of Glencoe, 1951, pp. 148-49.

¹⁶Robert M. MacIver, The Ramparts We Guard, New York: The Macmillan Co., 1950, pp. 84-92.

¹⁷Harold Lasswell, "The Threat to Privacy" in Robert M. MacIver (ed.), Conflict of Loyalties, New York: Harper and Bros., 1952, pp. 132ff.

If anomie is reflected in the individual's ego, it can probably be induced at a structural level other than that of the society. In fact, if the definition of anomie is extended only slightly, to include any condition of social structure that tends to produce an uncertainty of norms, then it becomes apparent that micro structure can be conducive to anomie. The vagueness of the cybernetic structure should itself contribute to anomie of the system members. In addition, it might be expected that those members of the system who occupy components exposing them to other systems and therefore, other value systems will be more susceptible to anomie than those occupying components associated with internal system structure. A greater possibility is that those system members relegated to a system substructure for which their socialization should not have been expected to prepare them adequately will experience a high level of anomie. Thus, a wife cast into the wage earner role, the husband thrown into the home maker role, and an immature child filling the position of parent surrogate would fall into this category.

In summary, an attempt has been made to establish that human beings are simultaneously influenced by multiple systems at four system levels, the organismic, the personality, the social, and the cultural. Each tends to exist in some type of dynamic, patterned change resembling an equilibrium. These systems are linked through interpenetration so that a disruption of the ordered change in one transmits stresses throughout the others, demanding adjustive behavior. Disease is a manifestation of this phenomenon. Obviously a disruption of the homeostasises of the organismic system, may partially result from

psychological stress, interactional stress, or debilitating, culturally determined behavior. Once in existence, this disruption of the organismic homeostasis is capable of inducing stress (anxiety) in the personality system. This anxiety, once it achieves sufficient intensity, may stimulate behavior at the level of social organization such as the acting out of the sick role. Nuances in the acting out of this role may, in turn, contribute to change in the cultural structure.

II. METHODOLOGY

Hypotheses

The relationship between disease and social structure is seen to be intricate with both apparently influencing each other in various ways. The relationship of social structure to disease is especially intriguing because it is apparently a significant factor in both the existence and the amelioration of many forms of pathology. Such a relationship suggests that at least some diseases may be a manifestation of maladaptation of the social system structure to the vital requirements of the personality and organismic systems. Such a lack of responsiveness on the part of the social system to the lower system levels might be the result of several types of structural defects. Among these is the condition of anomie which has been shown to be positively correlated with such mortality rates as suicide. Since anomie represents the degree to which the personality system is integrated into the social and cultural systems, it has implications for illness behavior as well as illness.

In order to explore these relationships as well as the more esoteric demographic relationships in morbidity the several hypotheses addressed are to provide direction to the exploration rather than to set a limit to the study. These hypotheses are:

1. Morbidity rates are related, either generically or differentially, in a positive direction to anomie.
2. Morbidity rates are related, either generically or differentially, in a positive direction to those several social conditions that can be considered conducive to anomie including:
 - a) lack of participation in the church
 - b) geographic mobility
 - c) urban residence
 - d) occupation of a social status-position for which socialization can be expected to be inadequate
 - e) marginality within the family structure
 - f) incompleteness of family structure
3. The occurrence of perceived pathology among the sampled populations will fall into patterns related to age, sex, income, education, and ethnicity.
4. Selected attitudes toward health care by these populations will fall into patterns related to age, sex, income, education, residence, and ethnicity.
5. The perception of symptoms as requiring medical care will vary with ethnicity, income, religion, and education.
6. The utilization of health care resources by these populations will fall into patterns related to age, sex, income, education, ethnicity, and anomie.

Research Procedure

Operationalization of Concepts

Indigent: Those persons falling below the O.E.O. income criteria for poverty.

<u>Family Size</u>	<u>Non farm</u>	<u>Farm</u>
1	\$1,900	\$1,600
2	2,500	2,000
3	3,100	2,500
4	3,800	3,200
5	4,400	3,700
6	5,000	4,200
7	5,600	4,700
Over; for each child	add 600	add 500

Anomie: Percentage of positive responses to a six item Guttman type scale developed by Leo Srole.¹⁸

Ethnicity: The quality of identifying with a particular national or racial origin as evidenced by the use of a foreign language in the home, distinctive features, or proclamation of the subject.

Incomplete family: A nuclear family unit in which one or more of the positions of father, mother, son, or daughter has never been filled or in which such a position, formerly filled, is presently vacant.

Method of Data Gathering

The method of data gathering for this study was decided upon with pragmatic objectives in mind. These were to gather data and explore relationships that would facilitate health care planning in three specified communities. Among the data required were morbidity

¹⁸Leo Srole, "Social Integration and Certain Corollaries: An Exploratory Study," American Sociological Review, XXI, (December, 1956), 709-16.

rates, epidemiology, attitudes toward health care, and patterns of health care of the indigent populations.

To accomplish the gathering of these data, a consumer survey approach was decided upon. It is true that this type of approach contains certain inherent limitations, especially in gathering data related to morbidity. Among the alleged limitations is the lack of accuracy in gathering morbidity data because of its reliance on subjective responses. The disadvantages of the survey approach, although somewhat discouraging, are not readily eliminated by the selection of alternate approaches. The diagnostic team approach, for example, has been found to produce inaccurate data also.¹⁹ In addition, it introduces unique logistical problems due to the need to recruit and mobilize volunteer subjects to submit to physical examinations.

Dorn suggests that, although clinical examinations do yield, morbidity data closer to reality than do household interviews, examinations of a general populations sample have had poorer response rates than interview surveys resulting in a greater problem of nonresponse bias. But even in household morbidity surveys, the most important methodological problem has been the extent of unreported disease.²⁰ Haberman indicates that in considering morbidity survey techniques the

¹⁹Harold F. Dorn, "Method of Measuring Incidence and Prevalence of Disease," American Journal of Public Health, XLI (March, 1951), 271-78.

²⁰Ibid.

one which elicits more positive responses about the presence is apt to be the more accurate.²¹

It appears then that the ideal morbidity study technique does not exist. The problem, thus, becomes one of selecting the technique most appropriate for the objectives and conditions at hand. Since our objectives were not limited to obtaining morbidity data, but included the determination of health care practices and attitudes, it was felt that at least part of the required information could best be obtained through the use of trained interviewers. In addition, since the morbidity data gathered was to serve the function of determining the nature of services to be provided to the target populations, any person believing himself to be ill should be considered a potential receiver of health services. Because of these considerations a survey technique was selected to gather these data.

A copy of the interview schedule appears in Appendix "A." The basic morbidity items were drawn from an instrument developed by Mulford at the University of Iowa Medical Center. To these items were added symptom eliciting items used in the Regionville study,²² items suggested by Mechanic's model of the help-seeking process,²³ items

²¹M. B. Bailey, et al., "The Epidemiology of Alcoholism in an Urban Residential Area," Quarterly Journal of Studies on Alcohol, XXVI, (March, 1965), 19-40.

²²Earl L. Koos, The Health of Regionville, New York: Columbia University Press, 1954.

²³Mechanic, op. cit., Ch. 4, pp. 130-31.

developed by Srole to quantify anomie,²⁴ and finally several items eliciting attitudes toward health care arrived at through several meetings of indigenous persons and a pre-test of the instrument.

Sampling Procedures

The geographic areas surveyed included the towns of Hammond and New Roads and a South Baton Rouge Neighborhood area. The procedural task was not to obtain a representative sample of each of the geographic areas but to obtain a sample that would provide insights into the illness and health care characteristics of the poverty populations of these areas. In Baton Rouge, the objectives were slightly different as the neighborhood selected was one that was under consideration for the establishment of a more effective health care delivery system. Time and money were also critical factors dictating that the sampling procedures utilized had to provide for optimum speed in data gathering.

Taking these factors into consideration the following procedures were decided upon. The three geographic areas were determined by the Louisiana Capital Area Health Planning Council and represented three types of residential centers under their planning jurisdiction. New Roads represents a market community still closely associated with an agrarian economy offering a high concentration of population with a French ethnic origin. Hammond presents a more cosmopolitan population with more ethnic diversity, but with a relatively high

²⁴Leo Srole, op. cit.

concentration of its population maintaining an Italian ethnic identity. The economy is moving away from its original agricultural base toward a commuting pattern of reliance on accessible industrial areas such as Baton Rouge and New Orleans. Baton Rouge provides an industrial community setting.

The sampling procedure varied somewhat in each of the geographic areas. In Baton Rouge, the neighborhood sampled approximated three census tracts located in a poverty area containing a representative number of both the black and white races. Because of this concentration of population the serpentine, two stage sampling method described by Kish²⁵ was employed with some modifications. First, the entire geographic area was outlined. It was then divided into blocks which were numbered. The sampling interval was calculated by determining the number of dwelling units to be included in the sample. In this instance, it was determined to be .05 of the number of households with an income lower than that considered to constitute medical indigency or approximately 330. This figure was divided by the approximate number of single household dwelling units in the area, which was 6,591, giving the probability of selection for each dwelling unit. The product of the probabilities of selection for each of the two stages must equal the overall probability ratio. The first stage, the city block, was generated by randomly selecting a border block in each of the three census tracts and from this point generating a sine curve

²⁵Leslie Kish, "Two Stage Sample of a City," American Sociological Review, XVII (December, 1952), 761-69.

over the combined census tracts. Each block that was intersected by this line was included in the sample and the probability of the first stage was computed by dividing the total number of blocks in the sample by the total number of blocks in the combined census tracts area. This value remained constant and the interviewers adjusted the probability of selection of each dwelling unit, the second stage, in order to achieve the established overall probability ratio.²⁶

In New Roads economic data gathered by the Office of Economic Opportunity were used. The city was divided into small geographic areas with income data available for each of these areas. These data were examined and a sufficient number of the areas with a concentration of medical indigency of 75% or greater were selected randomly to provide a total sample representing .07 of the medically indigent of the town. Saturation surveying was then utilized in each of these areas.

In Hammond a windshield survey was conducted to locate likely poverty dwellings. These were recorded on the census enumeration

²⁶These several values were determined to be as follows:
 Overall sampling probability ratio
 A = approximate number of dwelling units in the neighborhood geographic area = 6,591
 B = approximate number of dwelling units in the sample = 267
 C = overall sampling ratio = $B/A = .05$ or $1/20$
 First stage (city block)
 D = Number of city blocks in the neighborhood geographic area = 267
 E = number of city blocks in the sample = 54
 F = probability of the selection of each block = $E/D = .20$
 Second stage (dwelling unit)
 G = approximate number of dwelling units in a specific city block
 H = probability of selecting each dwelling unit:
 since $H \times F$ must = C and F is constant and C is constant then E must = $C/F = .05/.20 = .25$ or $1/4$.

district maps and the sample was drawn from them.

Methods of Analysis

The statistical analysis of these data is relatively straight forward. The Product Moment Coefficient of Correlation is used to explore those correlations between variables measured in interval scales. These include the correlation between morbidity rates and age, income, education and anomie. This latter variable is quantified by a modification of the Alleger method of scoring the Srole Anomie Scale.²⁷ For those data expressed as frequencies among dichotomized categories, chi square is employed. These data include the relative frequencies of morbidity in rural and urban settings as well as the relationship of morbidity to church participation, mobility, social status-position, incomplete family structure and sex. Comparisons of rank order variables is accomplished with the Kendall Rank Correlation Coefficient.

In view of the exploratory nature of this study and the large number of variables involved, the question of spuriousness arises. An effort was made to control for possible invalidating factors through refinement of variables and a constant search for relevant controls.²⁸

Limitations of this Study

One of the most serious limitations of this study is the

²⁷Daniel Alleger, "A Southern Rural Paradox: Social Change and Despair," (Tallahassee: Florida State University, Agricultural Experiment Station, Research Report, Vol. II, No. 1, January, 1966), p. 7.

²⁸Herbert Hyman, Survey Design and Analysis (Glencoe, Illinois: The Free Press, 1955), pp. 244-74.

absence of a time sequence making it impossible to employ elaboration techniques and to arrive at cause and effect relationships. Relationships which are determined to exist can be related to the three geographic areas sampled. Thus, ethnic nuances in sickness and health care determined to exist in this sample cannot be generalized to national populations. This is true also of the relationship between other attributes and illness or patterns of health care.

There is also a possibility that the contrived complex variables may not validly portray the qualities which they are purported to. The Srole Scale, for example, measures anomie, which is a social system phenomenon, at the level of the personality system. Similarly, a paradigm of health care utilization contrived to reflect the relative influence of various factors on the decision to seek treatment can only apriorily be assumed to exhaust these factors. The intent of the study is exploratory, however. As an exploratory study it detects relationships and suggests areas for future research.

CHAPTER III

THE SETTINGS AND POPULATIONS

I. THE INTENT

In the selection of the geographic areas from which the sample populations were drawn it was hoped to obtain population concentrations with varying degrees of industrialization and urbanization and with a representative number of the two major ethnic groups in the planning jurisdiction of the Capital Area Health Planning Council and of the black population. To accomplish this, three population centers were chosen. One of these, New Roads, is a trade center depending on a farm economy and having little industry that is not farm related. There is a prominent French ethnic population in the area. A dearth of transportation ingress and egress contributes to a quality of isolation. A second community, Hammond, is somewhat larger. Formally a farming area and produce shipping center, it is now beginning to address itself to industry. The town is situated at a rail and interstate highway crossroads. In this community, there is a large Italian ethnic population. The third population concentration is located in Baton Rouge, an industrial, urban area.

The intent of this study is not to compare three "ideal type" communities representing urban, transitional, and rural trade centers, but to compare health data and health care data related to a range of economic and population characteristics. The specific communities are important to the study only to the extent that they contain these

economic and population characteristics. Accepting the fact that these communities do not represent ideal types, the degree to which they approximate ideal types, as well as the extent to which they contrast with each other, can be seen only by comparing a description of the three.

II. THE SETTINGS

New Roads

Geographic Features

New Roads is located about thirty-five miles from Baton Rouge on a horseshoe shaped lake approximately twelve miles in length. Although it is situated near the Mississippi River, the river provides neither a means of transportation nor industry for the town other than a single, small ferry boat that crosses to the town of Saint Francisville. Neither is the town served by train or plane, nor is it located on a federal highway. Access is provided to the town by two black topped, state highways. The land is flat, alluvial and rich. The only known mineral deposits in the area are natural gas and oil.

Economy

The rich land, abundant rainfall and mild climate of the area is conducive to agriculture while the lack of resources and transportation as well as a limited sophisticated labor reservoir mitigate industrial development. The proximity of industry in Baton Rouge has enticed some residents from New Roads and a limited number commute daily. Despite this current influence, Pointe Coupee Parish and New

Roads have retained the tradition of being primarily an agricultural area and the residents take pride in this fact.¹

Of the parish's 360,960 acres, 240,000 are in farms on which 100,000 acres of crops are harvested and 140,000 are devoted to pasture land, both open and woodland. In 1968, the gross revenues from the major crops for the parish were as follows: (1) soybeans, \$3,072,000; (2) sugar cane, \$2,975,000; (3) beef cattle, \$2,520,000; (4) corn, \$1,487,000; (5) pecans and other horticulture crops, \$1,337,000; (6) cotton, \$770,200; (7) dairying, \$350,000; (8) swine, \$252,000; (9) Forestry, \$250,000; (10) Miscellaneous, \$150,000; (11) Poultry, \$170,000. Industry in the area around New Roads is largely agricultural related and includes a chip mill employing 16 full-time workers, cotton gins, a single sugar factory with 125 employees and a pecan shelling plant providing approximately seven months employment each year for about 35 persons. Oil was discovered in the parish in 1948. Although New Roads is not located in a producing oil field there are 185 oil wells in 11 oil fields in the parish.²

An indication of the nature of employment in the parish is found in the fact that only 11.6 per cent of the work force was employed in manufacturing in 1960. At that time the unemployment rate stood at 7.8 per cent. The median family income was \$3,875 for the

¹Bernard Curet, "Pointe Coupee: Her Economic Progress," Acadiana Profile - A Magazine for Bi-Lingual Louisiana, I (September and October, 1969), p. 28.

²Ibid.

parish with 40 per cent of the families earning less than \$3,000 and 8.8 per cent earning \$10,000 or over. The median education in the parish was 8.9 years in 1960 with 34.1 per cent of the population over twenty-five years having completed four years of high school or more.³

Hammond

Geographic Features

Hammond is located approximately forty-five miles East of Baton Rouge in a flat plain of relatively high P.H. soil. Although the town is not located on a navigable stream some of its citizens took the initiative in forming a port authority to develop the potential of a stream some sixteen miles distant. The town is also served by other forms of transportation as it is located at the intersection of two interstate highways and two rail lines. One of these rail lines is the trunk line of the Illinois Central Railroad. Regular bus service is provided by the Greyhound Bus Lines and local and area carriers. Six motor freight lines operate in and out of the city. The town also has a three runway airport, but no scheduled air flights.

The only known mineral deposit in the area is gravel. Five rivers and numerous creeks are located in the immediate vicinity of Hammond. None of these streams provide a commercial source of fish. Game also exists in the area, but, again does not provide a source of industry other than recreation.

³U.S. Department of Commerce: Bureau of the Census, Census of Population: 1960, Volume I: Characteristics of the Population, Part 20, Louisiana, U.S. Government Printing Office: Washington, D.C., 1961, 113.

Economy

The quality of the land around Hammond along with early settlement patterns on small plots of land is not conducive to large scale farming. The proximity of the urban markets of New Orleans and Baton Rouge and the accessibility of such markets as Chicago encourage some truck farming. Dairy farming and poultry farming are also carried on. However, the most important crop to the area historically, both in terms of value and cultural impact, is strawberries. During the past two years, the acreage devoted to this crop has declined from 10,000 acres to some 1,300 acres. Despite this large decline the city continues to designate itself as "the Strawberry Capital of the World." Another agricultural related industry that is in decline in the area is lumbering, but logging operations continue to be carried on to supply several soft wood saw mills and a nearby paper mill.

Concomitant with the decline of agriculture in the area, there has developed an awareness of industry as an alternative for economic growth. The city advertises the fact that it is located in close proximity to the great industrial-science complex of Louisiana. Recent efforts were made to attract several industries including a multi-million dollar steel foundry, machine shop, and rolling mill, a plywood plant, a plastic bonding manufacturer, and a candy company. Although none of these companies actually located in Hammond, all located nearby. In addition, the town contains a company manufacturing industrial valves, a brick company and a garment company. A 276 acre industrial park is in the planning stages and has been approved

by the U.S. Economic Development Administration for a participating grant for site development.⁴

The education level of the residents of Hammond is higher than those of Pointe Coupee Parish with 9.5 years being the median years attained and with 40 per cent of the population having completed four years of high school or more. A slightly larger proportion of the population in Hammond is involved in manufacturing with 11.7 per cent being thus employed in 1960. The unemployment rate was lower in that year than was the rate for Pointe Coupee Parish with only 5.3 of the work force being unemployed in Hammond. The median income was \$4,142 per family with 36 per cent of the families earning under \$3,000 annually and 11.7 earning 10,000 or more.⁵ Each of these statistics is slightly more favorable for Hammond than for Pointe Coupee Parish.

South Baton Rouge Neighborhood Area

Geographic Features

The South Baton Rouge Neighborhood Area is comprised essentially of census tracts 21,22,24 and 25. It is bordered on the North by South Boulevard, on the South by Roosevelt and State Streets, on the West by the Mississippi River, and on the East by Dalrymple Drive. Access to and from the area on the West and East sides is somewhat

⁴"Economic Facts About Hammond," An unpublished report with aceograph copies on file in the office of the Hammond Chamber of Commerce.

⁵U.S. Department of Commerce, op. cit., p. 111.

limited by natural geographic formations. On the West lies the Mississippi River with a single bridge accessible to South Baton Rouge Neighborhood. This bridge does not accommodate pedestrian traffic. On the East lies a recreation area containing several lakes and a golf course transected by a single local road. As a result of these natural barriers most traffic tends to move in a North-South direction although it may first move in an East or West direction to reach one of four major North-South traffic arteries. In addition to these natural formations the area itself was recently transected by an interstate highway which has made it difficult to travel from one side of the area to the other except by using a limited number of routes. The area is served effectively by city bus transportation.

Baton Rouge, the city in which the neighborhood is located, is well served by transportation including ship, barge, rail, air, bus, and truck. Three major air lines serve the local airport. Nine major, regularly scheduled motor freight lines have terminals in the city, which is located on Interstate Highway 10. To the North of Baton Rouge, are 14,000 miles of commercially navigable water routes.

Economy

Although there is an absence of industry in the immediate area of the South Baton Rouge Neighborhood, the city in which the neighborhood is located is highly industrialized. From 1960 to 1970, the per capita income increased from \$1,887 to \$2,907 and the mean per family income increased from \$6,788 to \$10,548 in the city.⁶ Industrial

⁶Baton Rouge Area Chamber of Commerce, A Decade of Progress: Economic Resume, Baton Rouge, Louisiana, Baton Rouge: Chamber of Commerce, 1971.

production accounted for \$173,857,671 in wages and salaries in Baton Rouge in 1970. These wages and salaries were generated by 126 manufacturing firms. Prominent among these industries are petrochemical, alumina reduction, plastics, building supplies, and janitorial chemicals.

The city is served by the nation's seventh largest port. Imports through this port include: coffee, steel, automobiles, motorcycles, lead, plywood and fluorspar. Exports include: rice, flour, powdered milk, petroleum, soda ash, motor fuel additives, fertilizers, lumber, and scrap iron.⁷

Several other factors exert an influence on the economy of the area. Among these are the presence of state government offices and Louisiana State University. A second university, Southern University, is located outside the incorporated limits of Baton Rouge, but the presence of this university probably also influences the area.

In 1960, 18.2 per cent of the work force in Baton Rouge were employed in manufacturing. This was much higher than either of the other two towns included in the survey. Unemployment, in 1960, stood at 6.1 per cent. The median family income was \$5,789 in that year with 22.1 per cent of the families earning less than \$3,000 and 18.3 per cent earning over \$10,000.

A comparison of the economic structure of the three areas can be made from the following table:

⁷Gulf States Utilities Company, Via Port of Baton Rouge, Gulf States Utilities Company, p. 2.

TABLE I
DISTRIBUTION OF LABOR FORCE AMONG OCCUPATIONAL CATEGORIES
IN THE PARISHES OF EAST BATON ROUGE, TANGIPAHOA
AND POINTE COUPEE, 1968⁸

Occupational Category	Parishes					
	East Baton Rouge		Tangipahoa		Pointe Coupee	
	number	rate	number	rate	number	rate
Agricultural sources	247	.3	138	1.6	(D)*	--
Mining	414		78		206	
Oil and gas	229		--		(D)*	
Nonmetallic minerals	185		78		--	
Contract Construction	19,036		575		166	
Manufacturing	18,061	21.7	2,012	23.8	213	13.5
Food	2,202		576		--	
Lumber and wood	325		999		128	
Printing and Publishing	1,042		--		--	
Chemicals	7,649		--		--	
Petroleum	(D)		--		--	
Stone, clay, glass	810		151		--	
Metals, primary	(D)		--		--	
Metals, fabrication	1,330		--		--	
Machinery	249		--		--	
Transportation equipment	117		--		--	
Administrative	217		--		--	
Transportation & Utilities	4,955		270		(D)*	
Wholesale sales	5,610		759		104	
Retail sales	14,981		2,762		480	
Finance, Insurance, R.E.	5,384		374		99	
Services	14,092		1,407		192	
Health Services	3,217		472		44	
Unclassified	284		79		(D)*	
TOTAL	83,064		8,444		1,575	

*Information withheld to respect confidentiality.

⁸U.S. Department of Commerce: Bureau of the Census, 1968 County Business Patterns, Louisiana, U.S. Government Printing Office: Washington, D. C., 1969, pp. 31-34, 70-72, 59-60.

These data suggest that by 1968, the trend toward industrialization in Tangipahoa Parish had proceeded to the point that a larger portion of its work force was engaged in manufacturing than was true of East Baton Rouge Parish. This is somewhat misleading, however, as Tangipahoa Parish also has a higher percentage of its work force in agricultural services and in agriculture related manufacturing such as food processing and lumber and wood products. Baton Rouge, on the other hand, has larger proportions of its work force deployed in other industry related and urban related categories.

These data do not appear to be inconsistent with the initial intent to select three communities representing three relatively distinct stages in the urbanization--industrialization or, perhaps, the *gemeinschaft-gesellschaft* continuum. One community is small, rural, isolated and agriculture oriented. The second community is somewhat larger with a significant agricultural past, but with an apparently increasing industrial awareness. The third community is clearly an established urban and industrial center.

III. THE POPULATIONS

It was also hoped that the sample would yield relatively larger proportions of three minority groups: Negroes in Baton Rouge, Italians in Hammond, and French in New Roads. This hope was only partially realized. As seen in Table II, the sample drawn in Baton Rouge did yield a large proportion of Negroes and the New Roads sample yielded a large proportion of French ethnic subjects, as expected. Although the sample drawn in Hammond did produce a larger proportion of persons with

an Italian ethnic identity than did either of the other two samples, this ethnic group still accounted for only 1.4 per cent of the Hammond sample. This condition apparently resulted from the fact that the Italian population of Hammond tends to settle outside the city limits and thus is outside the sample area.

TABLE II
ETHNIC AND RACE DISTRIBUTION OF THE SAMPLE POPULATIONS
FOR SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

Ethnic Group and Race	SAMPLE POPULATIONS						OVERALL TOTAL	
	South Baton Rouge		Hammond		New Roads			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
American	43	4.9	161	21.9	82	15.0	286	13.3
French	18	2.0	10	1.4	106	19.4	134	6.2
Italian	9	1.0	10	1.4	-0-	0.0	19	.9
Negro	792	89.5	547	74.3	352	64.4	1,691	78.4
German	9	1.0	6	0.8	-0-	0.0	15	.7
Other	8	0.9	0	0.0	5	0.9	13	.6
TOTAL	879		734		545		2,158	100.1

The breakdown of the sample population by sex in Table III shows a higher proportion of females in all three sample populations. This characteristic is most pronounced in South Baton Rouge Neighborhood and least pronounced in Hammond. The sex ratio in New Roads approximates that of Hammond.

TABLE III

A COMPARISON OF THE SEX RATIO OF THE SAMPLE POPULATIONS
OF SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

SEX	SAMPLE POPULATIONS						OVERALL TOTAL	
	South Baton Rouge		Hammond		New Roads			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Male	353	39.9	358	48.6	256	46.8	967	45.1
Female	524	59.2	373	50.7	280	51.2	1,177	54.9
TOTAL	877		731		536		2,144	100.0

The age distribution of the samples is shown in Table IV. Very nearly 50% of the total sample falls in the age range from 0-20 years. The actual percentage falling in this range is 49.5. This distribution is very nearly the same in each community. In Baton Rouge 48.3 per cent of the population falls in this category while in Hammond 49.7 per cent falls into this category. The New Roads sample has the highest percentage falling in the 20 years and below range with 51.5 per cent. In the age range between 20 years and 65 years, which might be considered the range of maximum industrial employability, the difference in distribution is a little greater. South Baton Rouge and Hammond are very similar with 40.3 per cent of the South Baton Rouge sample falling in this range and 39.6 of the Hammond sample also falling into this range. Only 35.6 of the New Roads sample is within these limits. At the other extreme Hammond more closely resembles New Roads in that 8.7 per cent of the Hammond sample is 70 years or over and 8.6 per cent of

the New Roads sample falls within this range. In the South Baton Rouge sample only 5.8 per cent of the sample is within this range. That portion of the Hammond sample falling from 70 and below has a mean of 23.2, the lowest of the three communities. New Roads is next with a mean of 24.2 and South Baton Rouge is highest with a mean of 26.1.

TABLE IV
AGE DISTRIBUTION OF THE SAMPLE POPULATIONS FOR SOUTH
BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

AGE IN YEARS	SAMPLE POPULATIONS						OVERALL TOTAL	
	South Baton Rouge		Hammond		New Roads			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
0 - 5	106	12.0	104	14.1	58	10.6	268	12.5
5 -10	110	12.4	108	14.7	84	15.4	302	14.0
10-15	111	12.5	83	11.3	73	13.3	267	12.4
15-20	101	11.4	71	9.6	57	12.2	229	10.7
20-25	68	7.7	72	9.8	25	4.6	165	7.7
25-30	51	5.8	37	5.0	29	5.3	117	5.4
30-35	30	3.4	32	4.3	26	4.8	88	4.1
35-40	35	4.0	18	2.4	29	5.3	82	3.8
40-45	34	3.8	28	3.8	20	3.7	82	3.8
45-50	28	3.2	24	3.3	16	2.9	68	3.2
50-55	37	4.2	36	4.9	24	4.4	97	4.5
55-60	32	3.6	19	2.6	8	1.5	59	2.7
60-65	41	4.6	26	3.5	17	3.1	84	3.9
65-70	45	5.1	14	1.9	21	3.8	80	3.7
70- over	51	5.8	64	8.7	47	8.6	162	7.5
TOTAL	880		736		534		2,150	99.9

There is not a great deal of difference in the types of dwellings occupied by the three sample populations. Table V reveals that in each community there is a strong tendency for the indigent population to live in single family dwellings. This tendency is greatest in New

Roads, only slightly less strong in Hammond and noticeably less strong in South Baton Rouge Neighborhood. This latter area tended to have the most persons living in dwelling types associated with transiency, including rooming houses and apartment houses. Only 1.1 per cent of the Hammond sample live in apartments while this type of dwelling is not represented in the New Roads sample.

TABLE V
DISTRIBUTION OF FAMILIES BY FUNCTIONAL DWELLING TYPE
IN THE SAMPLE POPULATIONS FOR SOUTH BATON
ROUGE, HAMMOND, AND NEW ROADS, 1971

FUNCTIONAL	SAMPLE POPULATIONS							
DWELLING	SouthBaton Rouge		Hammond		New Roads		OVERALL TOTAL	
TYPE	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Single Family	716	80.9	682	92.7	536	98.0	1,934	90.4
Duplex	66	7.5	35	4.8	8	1.5	109	5.1
Rooming House	5	0.6	1	0.1	1	0.2	7	.3
Apartment	82	9.3	8	1.1	0	0.0	90	4.2
Hotel	0	0.0	0	0.0	0	0.0	0	0.0
TOTAL	869		726		545		2,140	100.0

The three samples present differences in religious affiliation. Table VI shows that the Hammond sample contains the largest proportion of Protestants followed by South Baton Rouge Neighborhood. New Roads contains the largest proportion of Catholics, again followed by South Baton Rouge Neighborhood. The Hammond sample has the largest proportion

of medically constricted religious groups, while the New Roads sample has no one in this category.

TABLE VI
DISTRIBUTION BY RELIGIOUS AFFILIATION OF THE SAMPLE
POPULATIONS FOR SOUTH BATON ROUGE, HAMMOND,
AND NEW ROADS, 1971

RELIGIOUS AFFILIATION	SAMPLE POPULATIONS						OVERALL TOTAL	
	South Baton Rouge		Hammond		New Roads			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Catholic	131	14.8	84	11.4	403	73.7	618	28.8
Jewish	2	0.2	1	0.1	5	0.9	8	.4
Protestant	719	81.2	639	86.7	137	25.1	1,495	69.8
non- medically constric- tive	695	78.5	585	79.4	137	25.1	1,417	66.1
medically constric- tive	24	2.7	54	7.3	0	0.0	78	3.6
None	17	1.9	5	0.7	0	0.0	22	1.0
TOTAL	869		729		545		2,143	

The income of the Hammond sample is lower than both the New Roads and South Baton Rouge Neighborhood samples. Of perhaps, most importance is the fact that 64.3 per cent of the Hammond sample have a family income of \$4,000 or less per year. In the New Roads sample 58.5 per cent of the families have an annual income within this range while 55.5 per cent of the families in the South Baton Rouge sample fall within these limits. Table VII shows the income distribution of the three samples.

TABLE VII
INCOME DISTRIBUTIONS OF THE SAMPLE POPULATIONS FOR SOUTH
BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

INCOME CATEGORIES	SAMPLE POPULATIONS							
	South Baton Rouge		Hammond		New Roads		OVERALL TOTAL	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
\$0 - 1,000	57	6.4	38	5.2	15	2.7	110	5.2
1,001-2,000	136	15.4	187	25.4	118	21.6	441	20.9
2,001-3,000	170	19.2	172	23.4	145	26.5	487	23.1
3,001-4,000	128	14.5	76	10.3	42	7.7	246	11.7
4,001-5,000	118	13.3	58	7.9	39	7.1	215	10.2
5,001-6,000	46	5.2	75	10.2	23	4.2	144	6.8
6,001-7,000	38	4.3	35	4.8	22	4.0	95	4.5
7,001-8,000	68	7.7	42	5.7	21	3.8	131	6.2
8,001-over	95	10.7	38	5.2	106	19.4	239	11.3
TOTAL	856		721		531		2,108	99.9

Summary

The three sample populations present rather distinctive characteristics. The Negro race predominates in all three, but is much more numerous in the South Baton Rouge Neighborhood and Hammond samples. New Roads offers the fewest number of types of ethnic identities. The female sex exceeds the male sex in all three communities. However, this quality is most pronounced in South Baton Rouge while the Hammond and New Roads samples closely resemble each other in this respect. In age distribution Hammond and South Baton Rouge tend to resemble each other more in the below 20 years and 20 to 65 years ranges, while Hammond and New Roads are more similar in the above 70 years range. There appears to be more similarity between the functional dwelling types of the Hammond and Baton Rouge samples as well as between the overall religious affiliations.

CHAPTER IV

PERCEIVED MORBIDITY BY A PREDOMINENTLY
INDIGENT POPULATION

Perceived Seriousness of Symptoms

Since a survey approach was used to determine morbidity rates in this study, it must be considered a possibility that subjective feelings may influence the subjects' perception of themselves as having pathology. Pathological conditions that are manifested in symptoms which are considered not to be serious enough to require medical treatment may go untreated or even unnoticed while similar conditions, when existing with persons who interpret the manifested symptoms as serious, should result in the subjects' considering themselves sick. Thus, to some extent the difference in reaction to pathology may reflect a difference in sensitivity to symptoms. The extent to which this is true of groups or classes of people is important to health planning and offers a clearer understanding of perceived morbidity rates.

In the Resionville study, an effort was made to determine the extent to which members of different family income ranges considered various symptoms to be serious enough to require treatment by a medical doctor.¹ With only one addition the list of symptoms used in the Regionville study was submitted to the subjects of the present study. The results are tabulated according to community, race and ethnic identity, income and religion. Table VIII presents this information by community.

¹Earl L. Koos, The Health of Regionville, New York: Columbia University Press, 1954, p. 32.

TABLE VIII

EXTENT TO WHICH SELECTED SYMPTOMS ARE PERCEIVED AS SERIOUS
ENOUGH TO REQUIRE TREATMENT BY A MEDICAL DOCTOR AMONG
A PREDOMINANTLY INDIGENT POPULATION OF SOUTH BATON
ROUGE, HAMMOND, AND NEW ROADS, 1971

SYMPTOM	COMMUNITIES							
	South		Hammond		New Roads		Total	
	Baton Rouge		N=231		N=159			
	N	%	N	%	N	%	N	%
Loss of appetite	147	48.8	155	69.1	87	54.7	389	56.2
Persistent Backache	218	72.4	200	86.6	116	78.0	534	77.2
Continued Coughing	225	74.8	208	90.0	113	71.1	546	79.0
Persistent Joint & Muscle Pains	199	66.1	180	77.9	97	61.0	476	68.8
Bloody Stool	259	86.1	220	95.2	138	86.8	617	89.2
Bloody Urine	261	86.7	222	96.1	135	84.9	618	89.4
Excessive Vaginal Bleeding	229	76.1	213	92.2	120	75.5	562	81.3
Swelling of Ankles	192	63.8	185	80.1	107	67.3	484	70.0
Loss of Weight	178	59.1	170	73.6	98	61.6	446	64.5
Bleeding Gums	207	68.7	189	81.8	116	73.0	512	74.0
Chronic Fatigue	195	61.5	185	80.1	102	64.2	482	69.7
Shortness of Breath	234	77.8	212	91.8	133	83.7	579	83.7
Persistent Headaches	230	76.4	210	90.9	116	73.0	556	80.4
Fainting Spells	236	78.4	215	93.1	126	79.3	577	83.5
Pain in Chest	239	79.4	215	93.1	136	85.5	590	85.3
Lump in Breast	253	64.1	221	95.7	140	88.1	614	88.8
Lump in Abdomen	242	60.5	216	93.5	130	81.8	588	85.0
Fever	207	68.8	190	82.3	110	69.2	507	73.3
Persistent Stomach Cramps	236	78.4	204	88.3	116	73.0	556	80.4
TOTAL	4,187	1,390.0	3,810	1,645.0	2,236	1,406.3	10,233	1,480.8

This table reveals very little difference in the perception of symptoms as serious enough to require treatment by a medical doctor among the three communities. Loss of appetite is considered serious by the least number of people in all three communities while bloody stool is considered serious by the largest number of subjects in both South Baton Rouge and Hammond and by the second to largest number in New Roads. The rate of perception of symptoms as important is greatest in Hammond at 16.45 symptoms per person, lowest for Baton Rouge at 13.90 symptoms per person and is 14.06 per person in New Roads.

It is reasonable to expect a relationship between religious affiliation and symptom sensitivity. Religion and medicine were virtually inseparable through many centuries of man's history with some physicians actually being deified. With such a close relationship existing in the past it might be expected that the residual influence of these disciplines on each other would continue to be great. Of the religions found to exist among the subjects in this study it was found, in fact, that such an influence does exist. Of these religions, all were found to have clear statements on their relationship to illness and medical care contained within their doctrine.

The extent to which religion exerts an influence on health care varies greatly and affects the perception of disease, permissible diet, permissible treatment, and physician-patient relationship. Since the perception of illness might be expected, in turn, to affect the perception of symptoms, it may be worthwhile to explore, very briefly, the positions of the several religions encountered in this study on the nature of disease.

These religions include: Catholic, Baptist, Methodist, Church of the Latter Day Saints, Christian Scientist, Seventh Day Adventist, and several Pentecostal sects. Of these religions, the Catholic apparently has the most benign perception of disease. According to its doctrine, man is subject to disease and death because the "gift of immortality," given to Adam upon his creation was lost as part of the punishment for his disobedience. Illnesses are considered to be trials sent by God but not necessarily punishment.²

Of the protestant churches encountered in the study, the Baptist and Methodist also assume a benign position on illness feeling that it is neither punishment nor unreal. Originally, the leaders of the Church of Latter-Day Saints taught that disease resulted from defilement of the person. Today, however, the attitude of the members of this church is that sickness is real, sometimes inevitable or unavoidable, but to be cured or endured according to God's will. The members of another church of American origin, Jehovah's Witness, believe that all sickness resulted from the original violation of God's law concerning physical well-being, but sickness also has normal causes such as inherited constitutional liability factors. The Seventh-Day Adventist is an ultra-conservative denomination of the Protestant Church. According to their doctrine, pain, sickness, and death are the transgressions of our first parents. Similarly specific diseases may be vested upon a sinner because of his sins. Members do not believe all disease results from such

²Patrick O'Brien, Moral Problems in Hospital Practice, St. Louis: B. Herder Book Co., 1956, p. 111.

a cause, however.³ There is some variation among the subscribers to Pentecostal religions ranging from the more moderate Holiness Church to the more conservative Church of God and Holy Roller sect. All, however, feel that disease resulted from the original sin and its presence, to a greater or lesser extent, reflects a lack of faith.⁴ The final religion represented in this study, Christian Science, whose followers deny the existence of disease as a real condition. Instead, it is felt to be a manifestation of internal feelings.⁵

In view of this relationship between religion and illness, it appears potentially productive to explore the possible influence of religion on symptom sensitivity. For the purposes of this study the protestant religions were divided into two categories, non-medically constricted and medically constricted. Since all religions take some doctrinal position on illness and medical care, the distinction made between these two groups is relative rather than absolute. Essentially, the basis for the classification is the extent to which the religion embraces generally accepted medical procedures. Those that reject even a single such procedure are considered to be medically constricted. Those that allow the medical profession to make this determination are considered to be non-medically constricted. Mormans, Jehovah's Witnesses, Pentecostal Churches, and Christian Scientists are included in

³Richard T. Barton, Religious Doctrine and Medical Practice, Springfield: Charles C. Thomas, 1958, pp. 64, 71, 74, and 77.

⁴H. Black, The Pentecostal Movement, New York: Humanities Press, 1964, p. 149.

⁵Barton, op. cit., p. 83.

the first category. Baptists and Methodists comprise the second category.

The most difficult decision was encountered in the classification of Jehovah's Witnesses. Although the formal doctrine of this church permits its members to decide individually on the type of medical treatment they may seek, there is a strong feeling against blood transfusion. Because this position is defended so strongly by the members of the church, it was classified among the medically constrictive.

The data pertaining to the relationship between religious affiliation and the perception of symptoms as being serious enough to require treatment by a medical doctor are presented in Table IX.

A rather marked difference is found among these data. Among the Jews and the Medically Constricted Protestants, there is a somewhat greater overall tendency to view the enumerated symptoms as indicating the need for treatment by a medical doctor. All religious groups tend to view loss of appetite as the least serious symptom. A lower percentage of Jews and Medically Constricted Protestants consider persistent backache as serious enough to require medical treatment than do Catholics or non-Medically Constricted Protestants. This is also true of swelling ankles, bleeding gums, bloody stool, and bloody urine with the medically constricted Protestants also responding at a higher rate to the latter symptom. The Jews are unique in having a higher rate of response to fever and persistent stomach cramps as being serious enough to require treatment.

TABLE IX

DIFFERENCE IN PERCEPTION OF SELECTED SYMPTOMS AS SERIOUS ENOUGH TO REQUIRE TREATMENT BY A
MEDICAL DOCTOR IN A PREDOMINANTLY INDIGENT POPULATION OF SOUTH BATON ROUGE, HAMMOND,
AND NEW ROADS, SHOWN BY RELIGIOUS AFFILIATION, 1971

SYMPTOM	RELIGIOUS AFFILIATION												Grand Total %	
	Catholic		Jewish		Protestant				None		Other			
	N=187	%	N=3	%	N-Medically Constricted	%	Medically Constricted	%	Total %	N=8	%	N=2		%
					N=464		N=27							
Loss of Appetite	57.9		6.7		57.1		77.7		58.2	25.0		50.0		36.4
Persistent Backache	69.5		6.7		80.1		85.1		80.4	50.0		100.0		77.1
Continued Coughing	67.3		100.0		81.8		96.2		82.6	87.5		50.0		78.5
Persistent Joint & Muscle Pains	60.9		100.0		71.5		77.7		71.8	50.0		50.0		68.7
Bloody Stool	82.8		100.0		90.7		100.0		91.2	87.5		50.0		88.8
Bloody Urine	82.3		100.0		91.1		100.0		91.6	87.5		50.0		89.0
Excessive Vaginal Bleeding	74.3		100.0		82.9		100.0		83.9	62.5		50.0		94.7
Swelling of Ankles	61.4		6.7		73.2		85.1		73.9	25.0		0.0		69.7
Loss of Weight	56.6		6.7		66.5		88.8		67.8	25.0		50.0		64.2
Bleeding Gums	68.4		6.7		75.6		92.5		76.5	75.0		0.0		74.0
Chronic Fatigue	62.5		100.0		71.5		96.2		72.9	37.5		0.0		69.6
Shortness of Breath	76.4		100.0		85.1		96.2		85.7	87.5		100.0		83.3
Persistent Headaches	69.5		100.0		84.2		92.5		84.7	62.5		0.0		80.1
Fainting Spells	75.9		100.0		85.3		92.5		85.7	87.5		50.0		83.0
Pain in Chest	80.2		100.0		85.9		96.2		86.5	87.5		100.0		84.9
Lump in Breast	83.9		100.0		89.6		100.0		90.2	75.0		100.0		88.4
Lump in Abdomen	77.5		100.0		86.8		100.0		87.5	75.0		50.0		84.6
Fever	64.7		100.0		75.6		92.5		76.5	62.5		0.0		73.0
Persistent Stomach Cramps	72.1		100.0		82.3		92.5		82.8	87.5		50.0		80.0
TOTAL	1,340.1		1,833.3		1,517.8		1,762.9		1,531.3	1,237.5		225.0		1,475.6

In exploring the relationship between level of family income and perceived importance of symptoms an unexpected quality is found. The literature suggests that members of the lowest income range tend to assign less importance to symptoms overall. In the Regionville Study mentioned earlier the subjects were divided into three income classes with ranges of: \$3,000-\$11,000; \$1,800-\$4,200; and \$700-\$2,000. The members of the lowest income range tended to assign less importance to symptoms overall and to grossly undervalue symptoms such as chronic fatigue, bleeding gums, loss of weight, persistent joint and muscle pain, and shortness of breath.⁶

The data presented in Table X reveal that in the sample population surveyed for this study a somewhat different relationship obtains. The highest rate of perception of symptoms as serious enough to require medical care is found in the highest income group. However, the second highest rate occurs in the lowest income range. In fact, the percentage of such responses for the four lowest classes combined exceed that for the four highest income classes combined. The percentage of responses of the lowest class to the symptom of chronic fatigue was higher than that of all but two other income groups. There is, however, a great deal of similarity in the relative importance assigned to each symptom as evidenced by the percentage of responses of each income group.

Although there has long been a recognition of the subjectivity and variability of patients' description of their symptoms, there has

⁶Koos, op. cit.

TABLE X

INCOME DIFFERENTIAL AND THE PERCEPTION OF SELECTED SYMPTOMS AS SERIOUS ENOUGH
TO REQUIRE TREATMENT BY A MEDICAL DOCTOR IN A PREDOMINANTLY INDIGENT
POPULATION OF SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

SYMPTOM	INCOME RANGE									TOTAL
	0 -	1,001-	2,001-	3,001-	4,001-	5,001-	6,001-	7,001-	over	
	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	8,000	
	N=54	N=181	N=144	N=75	N=53	N=35	N=33	N=48	N=61	
	%	%	%	%	%	%	%	%	%	%
Loss of Appetite	70.3	48.6	59.0	62.6	47.1	57.1	36.3	50.0	72.1	55.9
Persistent Backache	87.0	69.0	78.4	76.0	71.6	85.7	66.6	72.9	88.5	76.1
Continued Coughing	90.7	75.1	75.0	82.6	81.1	82.8	63.6	66.6	86.8	77.9
Pers. Joint & Muscle Pns.	79.6	62.4	65.2	77.3	52.8	82.8	54.5	66.6	81.9	67.9
Bloody Stool	96.2	84.5	93.0	88.0	90.5	94.2	69.6	79.1	91.8	88.1
Bloody Urine	92.5	83.4	94.4	98.0	90.5	94.2	69.6	79.1	90.1	88.3
Excess. Vag. Bleeding	79.6	74.0	84.0	88.0	79.2	91.4	66.6	68.7	91.8	80.2
Swelling of Ankles	72.2	70.7	68.7	74.6	56.6	68.5	51.5	68.7	81.9	69.2
Loss of Weight	66.6	55.8	63.1	76.0	56.6	71.4	51.5	58.3	80.3	63.4
Bleeding Gums	72.2	67.9	77.0	82.6	71.6	82.8	54.5	66.6	78.6	73.0
Chronic Fatigue	74.0	64.0	70.1	72.0	67.9	77.1	57.5	66.6	77.0	69.0
Shortness of Breath	88.8	82.3	70.1	82.6	79.2	85.7	60.6	68.7	88.5	82.6
Persistent Headaches	85.1	71.2	85.4	86.0	77.3	88.5	63.6	66.6	90.1	79.3
Fainting Spells	90.7	69.5	84.7	84.0	83.0	88.5	63.6	70.8	90.1	82.3
Pain in Chest	90.7	80.6	92.3	84.0	81.1	88.5	66.6	70.8	90.1	84.2
Lump in Breast	92.5	86.7	91.6	88.0	88.6	94.2	66.6	75.0	93.4	87.7
Lump in Abdomen	92.5	79.5	88.8	86.0	84.9	88.5	63.6	70.8	91.8	83.9
Fever	81.4	66.8	76.3	74.6	66.0	80.0	60.6	62.5	83.6	72.3
Persistent Stomach Cramps	90.7	72.9	84.0	74.6	84.9	91.4	63.6	62.5	91.8	79.2
TOTAL	1,594.4	1,376.2	1,520.1	1,533.3	1,411.3	1,594.2	1,151.5	1,287.5	1,640.9	1,461.4

been little attention directed to the fact that this discrepancy in reporting may be influenced by systematic social factors such as race and ethnicity. It is possible that the patient is inclined to emphasize those symptoms which they consider important and to de-emphasize, perhaps, to the point of omitting, those symptoms which they deem to be unimportant. Zola reports different ethnic perceptions of essentially identical illnesses among groups of Irish and Italians. He felt this difference to be striking in view of the absence of known physiological difference between the ethnic groups.⁷

In Table XI, we see the difference in the perception of importance of relatively common symptoms among the various racial and ethnic groups included in this study. These data suggest that the Negro race tends to react at a lower overall rate to the enumerated symptoms than does the white race. There is a rather wide variation in the overall responses among the various ethnic groups of the white race. The Germans tend to respond at a lower rate to the symptoms overall. However, with only four subjects of this ethnic group included in the sample, it is impossible to make generalizations. The French also tend to respond at a lower rate to the symptoms overall while the Italians and Americans tend to respond at higher rates. The Italian ethnic group is the only class examined in which the highest proportion of members rate loss of appetite as a symptom serious enough to require treatment by a medical doctor. Other than this there appears to be little striking difference.

⁷Irving K. Zola, "Culture and Symptoms - An Analysis of Patients' Presenting Complaints," American Sociological Review, XXXI (October, 1966), 615-30.

TABLE XI

ETHNIC DIFFERENTIAL IN THE PERCEPTION OF SELECTED SYMPTOMS AS SERIOUS ENOUGH
TO REQUIRE TREATMENT BY A MEDICAL DOCTOR IN A PREDOMINENTLY INDIGENT
POPULATION OF SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

SYMPTOM	RACE AND ETHNIC IDENTITY							(N=691) GRAND TOTAL
	N=507 NEGRO	(N=52) FRENCH	(N=12) ITALIAN	(N=108) AMERICAN	(N=4) GERMAN	(N=8) OTHER	N=184 TOTAL	
	%	%	%	%	%	%	%	
Loss of Appetite	58.1	42.3	75.0	54.6	25.0	37.5	51.0	56.2
Persistent Backache	78.1	65.3	58.3	83.3	75.0	37.5	74.4	77.1
Continued Coughing	80.0	55.7	66.7	87.0	75.0	62.5	75.5	78.8
Pers. Joint & Muscle Pains	70.4	51.9	58.3	74.0	50.0	25.0	64.1	68.7
Bloody Stool	91.1	75.0	75.0	91.6	75.0	50.0	83.6	89.1
Bloody Urine	90.7	73.0	75.0	91.6	75.0	100.0	85.3	89.2
Excess. Vaginal Bleeding	82.0	71.1	58.3	86.1	75.0	62.5	78.8	81.1
Swelling of the Ankles	72.7	53.8	58.3	67.5	25.0	62.5	61.9	69.8
Loss of Weight	66.7	48.0	50.0	62.9	25.0	87.5	58.1	64.3
Bleeding Gums	75.9	55.7	58.3	75.9	75.0	62.5	68.4	73.9
Chronic Fatigue	69.4	59.6	66.7	75.0	75.0	75.0	70.1	69.6
Shortness of Breath	86.1	65.3	58.3	84.2	25.0	100.0	76.6	83.6
Persistent Headaches	81.4	57.6	58.3	87.9	50.0	100.0	77.1	80.3
Fainting Spells	84.2	63.4	66.7	89.8	75.0	100.0	80.9	83.3
Pain in Chest	86.5	62.3	66.7	89.8	50.0	100.0	81.5	85.2
Lump in Breast	89.9	75.0	66.7	90.7	100.0	100.0	85.3	88.7
Lump in Abdomen	86.5	67.3	58.3	87.0	100.0	100.0	80.4	84.9
Fever	74.9	53.8	66.7	75.9	25.0	87.5	68.4	73.2
Persistent Stomach Cramps	81.0	61.5	66.7	86.1	100.0	87.5	78.2	80.3
TOTAL	1,506.5	1,163.4	1,208.3	1,541.6	1,175.0	1,437.5	1,400.5	1,478.2

Morbidity

Although, perhaps not to the extent expected, it is established by these data that there does exist in the sample examined, a variation in the degree to which members of various groups perceive symptoms as serious enough to require treatment by a medical doctor. Apparently, then, something other than the physical presence of the symptom influences an individual's awareness of pathological conditions. Thus, groups tending to inflate the seriousness of symptoms may tend to over report pathology while those tending to minimize symptoms may tend to under report pathology. It is with this reservation that the data on morbidity should be examined.

These data were obtained by asking the subjects to respond to an inventory of pathological conditions. A copy of this inventory is found in Appendix B. For the purpose of analysis, these conditions were collapsed into the fourteen categories found in the following tables.

Anomie and Perceived Morbidity

The system model selected for this study assumes an interpenetration of system levels at the level of the social system. That is to say that a social system is simultaneously influenced by the organismic systems of its members, the personality system of its members, the social system that arises once a consensus is established and endures as long as the functional imperatives are continuously resolved, and the cultural system which arises as desired or ideal norms are defined and recorded or introjected.

If such an interpenetration of system levels does, indeed, exist, influences existing at one system level might be expected to be accompanied by corollaries at other system levels. Pathology might be viewed as a disruption of the integrated functioning of the organismic system. If this is the case and if interpenetration of system levels occurs then it is possible that analogous disintegration may exist at higher system levels. Although the precise nature of this analogous disintegration cannot be known, it is possible that anomie is a manifestation of it.

Although anomie is not a difficult concept to recognize it has been defined in various ways and has proven to be an elusive concept to operationalize. In this study anomie at the personality system level, is considered to be reflected by positive responses to items on the Srole Scale.⁸ A review of the items on this scale suggests that it probably is more appropriate to MacIver's conceptualization of anomie than to Durkheim's. As mentioned in Chapter II, MacIver views anomie as "the breakdown of the individual's sense of attachment to society."⁹

To determine the subjects' level of anomie they were asked to respond to the six items of the Srole Scale. A score of one was given for each positive response. A score of 0, then, represents an absence of anomie while a score of 6 represents maximum anomie.

⁸Leo Srole, "Social Integration and Certain Corollaries: An Exploratory Study," American Sociological Review, XXI (December, 1956), 709-16.

⁹Robert M. MacIver, The Ramparts We Guard, New York: The Macmillan Company, 1950, pp. 84-92.

To explore the relationship between anomie and morbidity the relationship between anomie scores and morbidity rates was determined. However, since this provides insights only into the relationship between morbidity and "psychological" anomie, there remains a need to examine the relationship between "structural" anomie. This is done by selecting those social conditions, such as incomplete family structure, geographic instability and marginal position in the family, which can intuitively be considered to be characterized by a lack of clarity of norms or a feeling of alienation. Table XII presents data on the rate of perceived morbidity as it relates to the level of anomie.

The literature indicates the possibility of a relationship between morbidity and anomie. In one study, Thorton found that among a sample of sick or disabled people, a significant number manifested higher than expected feelings of loneliness, resentment, tedium, restlessness, anxiety and depression.¹⁰ Although these feelings cannot be considered identical to anomie, they do seem to be related to the psychological manifestation of this condition. Further, they establish the fact that there can be a relationship between emotions and physical health.

The data in Table XII do indicate a positive relationship between level of anomie and overall pathology rate. The Product-Moment Coefficient of Correlation yielded a value of $+0.84$. This relationship is equally clear between cardiovascular diseases and anomie and arthritis and anomie.

¹⁰Janet Thorton, The Social Component in Medical Care, New York: Morningside Heights: Columbia University Press, 1937, pp. 188-93.

TABLE XII
RATES OF PERCEIVED MORBIDITY FOR SELECTED DISEASE CATEGORIES SHOWN BY LEVELS
OF ANOMIE IN A PREDOMINENTLY INDIGENT POPULATION OF SOUTH
BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

DISEASE CATEGORY	LEVELS OF ANOMIE														OVERALL TOTAL N=675	
	0		1		2		3		4		5		6			
	N=29		N=75		N=96		N=116		N=127		N=138		N=94			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Cardiovascular	6	20.7	16	21.3	25	26.0	44	37.9	40	21.5	60	43.5	39	41.5	230	34.0
Upper Respiratory	3	10.3	3	4.0	11	11.5	15	12.9	14	11.0	24	17.4	8	8.5	78	11.5
Allergy Reaction	7	24.1	19	25.3	24	25.0	27	23.3	29	22.8	43	31.2	21	22.3	170	25.1
Mental Illness & Retardation	5	17.2	9	12.0	14	14.6	15	12.9	27	21.3	30	21.7	29	30.9	129	19.1
Endocrine	1	3.4	4	5.3	6	6.3	12	10.3	10	7.9	12	8.7	6	6.4	51	7.5
Orthopedic Problems	5	17.2	10	13.3	8	8.3	18	15.5	31	24.4	32	23.2	17	18.1	121	17.9
Abdominal & Intestinal Injury & Disease	6	20.7	11	4.7	19	19.8	30	25.9	42	33.1	41	29.7	24	25.5	173	25.6
Cancer	4	13.8	1	1.3	4	4.2	5	4.3	4	3.1	6	4.3	1	1.1	25	3.7
Eye, Ear, Nose & Throat	6	20.7	10	13.3	15	15.6	23	19.8	32	25.2	29	21.0	28	29.8	143	21.1
Arthritis	7	24.1	10	13.3	28	29.2	30	25.9	34	26.8	50	36.2	36	38.3	195	28.8
Neuroskeletal-Muscular	2	6.9	3	4.0	1	1.0	1	0.9	3	2.4	7	5.1	6	6.4	23	3.4
Dental	0	0.0	1	1.3	2	2.1	0	0.0	0	0.0	0	0.0	3	3.2	6	.8
Alcoholism	0	0.0	0	0.0	0	0.0	1	0.9	2	1.6	0	0.0	1	1.1	4	.5
Other Infectious Diseases	1	3.4	1	1.3	2	2.1	3	2.6	4	3.1	9	6.5	5	5.3	25	3.7
TOTAL	53	182.8	98	130.7	159	165.6	224	193.1	272	214.2	343	248.6	224	238.3	1,373	203.4

Having established that a positive correlation does indeed exist between perceived morbidity and anomie attention is next directed to those types of social conditions that might be associated with anomie. Since some sociologists interpret anomie as a feeling of isolation, alienation, or lack of belonging, it would seem that persons living a nomadic life characterized by frequent moving might be expected to experience a high level of anomie. In fact, even those families who move infrequently might be expected to experience an alienation immediately following such moves.

The literature is not entirely clear on this point. The study by Graham, mentioned earlier, brought out that it was not first generation immigrants, but subsequent generations who experienced increased morbidity.¹¹ Studies of tuberculosis, on the other hand, bring out the fact that many of the victims of this disease are characterized by geographic instability and a poverty of human associations.¹²

To explore this area the subjects were asked how many times they had moved during the past 3 years. These data were then compared to perceived morbidity rates. This relation is shown in Table XIII. The population proved to be very stable with only 4 people having moved over five times. Overall there appears to be no relationship between the number of times that a family moved and the rate of perceived

¹¹Saxon Graham, "Ethnic Background and Illness in a Pennsylvania County," Social Problems, IV (July, 1956), 79.

¹²Norman G. Hawkins, Medical Sociology, Springfield: Charles C. Thomas, 1958, p. 93.

TABLE XIII

RATES OF PERCEIVED MORBIDITY FOR SELECTED DISEASE CATEGORIES AS SHOWN BY
GEOGRAPHIC STABILITY OF FAMILIES IN A PREDOMINENTLY INDIGENT
POPULATION OF SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

DISEASE CATEGORY	GEOGRAPHIC STABILITY OF FAMILIES									
	N=600		N=126		N=36		N=4		N=766	
	1. NO MOVES		2. ONE OR MOVES		3. THREE TO FIVE MOVES		OVER FIVE MOVES		OVERALL TOTAL	
	N	%	N	%	N	%	N	%	N	%
Cardiovascular	214	35.7	24	19.0	4	11.1	0	0.0	242	31.5
Upper Respiratory	60	10.0	20	15.9	3	8.3	0	0.0	83	10.8
Allergy Reaction	141	23.5	30	23.8	13	36.1	1	25.0	185	24.1
Mental Illness & Retardation	110	18.3	20	15.9	5	13.9	1	25.0	136	17.7
Endocrine	44	7.3	6	4.8	4	11.1	0	0.0	54	7.0
Orthopedic Problems	104	17.3	20	15.9	8	22.2	1	25.0	133	17.3
Abdominal & Intestinal Injury & Disease	145	24.2	31	24.6	12	33.3	1	25.0	189	24.6
Cancer	22	3.7	5	9.0	1	2.8	3	75.0	31	4.0
Eye, Ear, Nose & Throat	128	21.3	14	11.1	4	11.1	1	25.0	147	19.1
Arthritis	182	30.3	13	10.3	2	5.6	0	0.0	197	25.7
Neuroskeletal-Muscular	18	3.0	3	2.4	1	2.8	1	25.0	23	3.0
Dental	2	.3	5	4.0	0	0.0	0	0.0	7	.9
Alcoholism	2	.3	0	0.0	1	2.8	0	0.0	3	.3
Other Infectious Diseases	23	3.8	3	2.4	3	8.3	1	25.0	30	3.9
TOTAL	1,196	199.3	194	153.9	61	169.4	10	250.0	1,461	190.7

morbidity. There is a positive relationship between the number of family moves and abdominal and intestinal diseases. There is also a negative relationship with mental illness and with arthritis. This latter relationship suggests that the more stable population may tend to be the older population, since the rate of arthritis increases with age.

Observing that there is not a relationship between family mobility and disease rates, the question arises as to the explanation of the higher tuberculosis rates experienced by transient populations. Since these populations were also characterized by a poverty of human association it is possible that it may have been this latter quality which was positively associated with the incidence of the disease. To determine whether a similar influence might be operating in the present study, the subjects were broken down into five types of family composition: complete, mother absent, father absent, both parents absent, and single adults. The morbidity rates were determined for each type of family. These data are tabulated in Table XIV.

The lowest morbidity rate is experienced by the complete family type. This rate is exceeded by members of all types of incomplete families. The striking feature of these data is the fact that the adult living alone experiences about 2.45 the rate of morbidity than do members of complete families. Thus, the highest rate of illness is experienced by the single adult, who would be the person expected to have the least interpersonal interaction. Intuitively, it might be expected that the single adult would also be the person with the

TABLE XIV
RATES OF PERCEIVED MORBIDITY FOR SELECTED DISEASE CATEGORIES AS SHOWN BY
FAMILY COMPOSITION IN A PREDOMINENTLY INDIGENT POPULATION OF
SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

DISEASE CATEGORY	FAMILY COMPOSITION											
	Mother Only		Father Only		No Parent		Single Adult		Complete Family		Total	
	N=563		N=30		N=82		N=148		N=1346		N=2169	
	N	%	N	%	N	%	N	%	N	%	N	%
Cardiovascular	93	16.5	3	10.0	17	20.7	53	35.8	176	13.1	342	15.7
Upper Respiratory	43	7.6	1	3.3	9	11.0	19	12.8	104	7.7	176	8.1
Allergy Reaction	79	14.0	8	26.7	12	14.6	27	18.2	197	14.6	323	14.9
Mental Illness & Retardation	58	10.3	3	10.0	6	7.3	32	21.6	100	7.4	199	9.2
Endocrine	23	4.1	0	0.0	2	2.4	19	12.8	32	2.4	76	3.5
Orthopedic Problems	52	9.2	4	13.3	9	11.0	34	23.0	112	8.3	211	9.7
Abdominal & Intestinal Injury & Disease	80	14.2	3	10.7	8	9.8	34	23.0	157	11.7	282	13.0
Cancer	11	2.0	2	6.7	2	2.4	4	2.7	25	1.9	44	2.0
Eye, Ear, Nose & Throat	51	9.1	3	10.0	11	13.4	44	29.7	139	10.3	248	11.4
Arthritis	68	12.1	1	3.3	7	8.5	52	35.1	124	9.2	252	11.6
Neuroskeletal-Muscular	27	4.8	0	0.0	1	1.2	7	4.7	32	2.4	67	3.1
Dental	3	.5	0	0.0	0	0.0	3	2.0	3	.2	9	.4
Alcoholism	2	.4	0	0.0	0	0.0	0	0.0	7	.5	9	.4
Other Infections & Fevers	23	4.1	2	6.7	1	1.2	12	8.1	56	4.2	94	4.3
TOTAL	613	108.8	32	106.6	85	103.6	338	228.3	1,264	93.3	2,332	107.5

strongest feelings of alienation. It is also possible, however, that the higher morbidity rate of the single adult is at least partially explained by the fact that the single adult population is also an older population.

Even in intact families there is a possibility that some members may be exposed to anomic conditions. For example, a person who has developed a particular set of norms over an extended period of time and finds that, because of changing circumstances, these norms can no longer be utilized may experience anomie as a result. This would appear to be especially likely if the culture did not clearly articulate acceptable norms for the changed circumstance. Such would seem to be the case with the husband who has lost his position as head of the household or the wife who has had to assume the position of head of household.

Tables XV and XVI provide data on Pathology rates of Male, head of household; female, head of household; male (husband), non-head of household; and female (wife), non-head of household.

In Table XV, it is seen that the overall morbidity rate for the female head of household is higher than that for the male head of household. This suggests that the female head of household, occupying a position for which she has not been socialized, may not feel comfortable with the required behavior and, thus, is vulnerable to anomie. Of course, another explanation is that the female in this sample may experience a higher morbidity rate than the male, thus, explaining the difference in rates found in this table.

TABLE XV

PERCEIVED MORBIDITY RATES FOR HEAD OF HOUSEHOLD SHOWN BY SEX IN A PREDOMINENTLY
INDIGENT POPULATION OF SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

PATHOLOGY CATEGORY	HEAD OF HOUSEHOLD					
	Male N=330		Female N=235		Total	
	N	%	N	%	N	%
Cardiovascular	90	27.3	107	45.5	197	34.9
Upper Respiratory	38	11.5	29	12.3	67	11.9
Allergy Reaction	52	15.8	54	23.0	106	18.8
Mental Illness and Retardation	34	10.3	59	25.1	93	16.5
Endocrine	11	3.3	31	13.2	42	7.4
Orthopedic Problems	68	20.6	49	20.9	117	20.7
Abdominal and Intestinal Disease and Injury	74	22.4	73	31.1	147	26.0
Cancer	9	2.7	9	3.8	18	3.2
Eye, Ear, Nose, and Throat	58	17.6	58	24.7	116	20.5
Arthritis	53	16.1	92	39.1	145	25.7
Neuroskeletal and Muscular	12	3.6	5	2.1	17	3.0
Dental	1	.3	4	1.7	5	.9
Alcoholism	5	1.5	0	0.0	5	.9
Other Infections and Fevoral	10	3.0	7	3.0	17	3.0
TOTAL	515	156.1	577	245.5	1,092	193.3

TABLE XVI
PERCEIVED MORBIDITY RATES FOR HUSBAND AND WIFE, NON-HEAD OF
HOUSEHOLD, IN A PREDOMINANTLY INDIGENT POPULATION OF
SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

PATHOLOGY	NON-HEAD OF HOUSEHOLD					
	Husband N=19		Wife N=296		Total	
	N	%	N	%	N	%
Cardiovascular	5	26.3	82	27.7	87	27.6
Upper Respiratory	1	5.3	24	8.1	25	7.9
Allergy Reaction	2	10.5	85	28.7	87	27.6
Mental Illness and Retardation	3	15.8	55	18.6	58	18.4
Endocrine	0	0.0	20	6.8	20	6.3
Orthopedic Problems	4	21.1	31	10.5	35	11.1
Abdominal and Intestinal Disease and Injury	6	31.6	68	23.0	74	23.5
Cancer	2	10.5	9	3.0	11	3.5
Eye, Ear, Nose, and Throat	4	21.1	44	14.9	48	15.2
Arthritis	6	31.6	69	23.3	75	23.8
Neuroskeletal and Muscular	0	0.0	9	3.0	9	2.9
Dental	0	0.0	1	.3	1	.3
Alcoholism	1	5.3	0	.0	1	.3
Other Infectious and Fevoral	1	5.3	11	3.7	1	.3
TOTAL	35	184.2	508	171.6	532	168.9

One way to explore this possibility further is to compare the morbidity rates for the female head of the household with the female non-head of household. This is possible by comparing the rates for females in both Tables XV and XVI. Such a comparison reveals that the housewife suffers a much lower morbidity rate than does the female head of household. This supports the contention that the higher morbidity rate is associated with the family status in question. The behavior of the morbidity rates of the male is not inconsistent with this contention, with the male head of household experiencing a lower rate of morbidity than the male non-head of household. This, however, might be explained by the fact that illness itself may account for the male losing the position of head of household.

In turning our attention to children it is assumed that there is a possibility that one child might be singled out by the family as being different. When this is the case, the child so designated might reasonably be considered to be in an anomic structure because of the resulting defective integration into the normative structure of the family. In an effort to explore this, the parents were asked which of their children, if any, they considered to be the most different from the rest of the family. If the apparent difference was due to an illness, the response was not accepted. For those responses which were accepted the rate of morbidity was determined and compared to the morbidity rates of children not designated as different. These data are recorded in Table XVII. According to these data, the overall morbidity rate for the children designated as atypical is much greater than the rate for normal children.

TABLE XVII
PERCEIVED MORBIDITY RATES FOR ATYPICAL AND NORMAL CHILDREN IN A
PREDOMINENTLY INDIGENT POPULATION OF SOUTH BATON ROUGE,
HAMMOND AND NEW ROADS, 1971

PATHOLOGY	STATUS OF CHILD					
	Atypical N=138		Normal N=918		Total	
	N	%	N	%	N	%
Cardiovascular	3	2.2	17	1.9	20	1.9
Upper Respiratory	9	6.5	60	6.5	69	6.5
Allergy Reaction	20	14.5	82	8.9	102	9.7
Mental Illness and Retardation	6	4.3	17	1.9	23	2.2
Endocrine	0	0.0	5	.5	5	.5
Orthopedic Problems	6	4.3	28	3.1	34	3.2
Abdominal and Intestinal Disease and Injury	7	5.1	29	3.2	36	3.4
Cancer	4	2.9	4	.4	8	.8
Eye, Ear, Nose, and Throat	12	8.7	42	4.6	54	5.1
Arthritis	0	0.0	9	1.0	9	.9
Neuroskeletal and Muscular	9	6.5	24	2.6	33	3.1
Dental	0	0.0	0	0.0	0	0.0
Alcoholism	0	0.0	0	0.0	0	0.0
Other Infections and Fevoral	7	5.1	47	5.1	54	5.1
TOTAL	83	60.1	364	34.5	447	42.3

Having established at this point that there is a relationship between anomie at the personality system level, as measured by the Srole Scale, and morbidity and that a similar relationship exists at the social system level, at least at the level of the family, it remains to explore the possibility of the relationship existing in the larger social structure. It has already been demonstrated that elevated morbidity rates do not accompany mobility within the larger social structure. Another interesting possibility is that persons who are members of formal social structures such as clubs and civic organizations might be considered in a less anomic structural condition than non-members since such memberships may tend to affirm the individual's vital participation in the social structure.

The population with which we are working is largely indigent, however, limiting any formal organization memberships to those that are inexpensive and non-exclusive. Since the church is a formal organization that meets these two criteria, an effort was made to determine those subjects who actively participated in the church either by attending at least twice each month on the average or by contributing money or time at least once each month. Perceived morbidity rates were then determined for the active and inactive subjects in each category. These data are presented in Table XVIII.

According to these data these persons who participate actively in church either in attendance or in contributions tend to have a lower overall rate of morbidity. This relationship is a little stronger for those who attend regularly. For this population the morbidity rates of

TABLE XVIII
PERCEIVED MORBIDITY RATES SHOWN BY QUALITY OF CHURCH PARTICIPATION
OF A PREDOMINENTLY INDIGENT POPULATION OF SOUTH
BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

DISEASE CATEGORY	CHURCH PARTICIPATION							
	Attendance				Contribution			
	Regular (N=1761)		Non-Regular (N=381)		Active (1084)		Inactive (461)	
	N	%	N	%	N	%	N	%
Cardiovascular	271	15.4	67	17.6	264	15.7	75	16.3
Upper Respiratory	139	7.9	36	9.4	134	8.0	41	8.9
Allergy Reaction	256	14.5	58	15.2	250	14.8	65	14.1
Mental Illness & Retardation	154	8.7	44	11.5	141	8.4	57	12.4
Endocrine	60	3.4	16	4.2	54	3.2	21	4.6
Orthopedic Problems	161	9.1	46	12.1	157	9.3	50	10.8
Abdominal and Intestinal Disease and Injury	226	12.8	53	13.9	223	13.2	57	12.4
Cancer	34	1.9	10	2.6	33	2.0	10	2.2
Eye, Ear, Nose & Throat	182	10.3	63	16.5	180	10.7	65	14.1
Arthritis	207	11.8	44	11.5	196	11.6	54	11.7
Neuroskeletal and Muscular	53	13.0	11	2.9	52	3.1	13	2.8
Dental	8	.5	1	.3	4	.2	5	1.1
Alcoholism	7	.4	2	.5	7	.4	2	.4
Other Infections & Diseases	75	4.3	19	5.0	71	4.2	23	5.0
TOTAL	1,833	104.	470	123.	1,766	105.	538	117.

the non-regular attenders exceeded those of the regular attenders in all but three pathology categories: arthritis, neuroskeletal-muscular disorders, and dental conditions. None of these three differences are significant at the .05 level of confidence.

The three communities represented in the sample provide three levels of urbanization-industrialization. Assuming that there is a tendency for urbanization to produce anomie an opportunity is offered to investigate the relationship between this form of structural anomie and perceived morbidity. The literature is not very precise in this area. Some authorities argue a higher morbidity rate for rural, or less anomic, areas.^{13,14} However, this may not be true for all pathologies. Matt and Rosen concluded that whatever may be the pathogenesis of arteriosclerotic or hypertensive heart disease, there is much evidence to point to a relationship with the nervous strains more typically a part of urban than rural life.¹⁵ In a study by Hawkins, it was shown that tuberculosis rates correlate to population density and crowding.¹⁶ Mott reveals that the rates of appendicitis, orthopedic impairments, diseases of the ear and mastoid, and hernia appear to be higher in urban areas. On the other hand, he mentioned that the most

¹³E. G. Jaco, Patients, Physicians and Illness, Glencoe: The Free Press, 1958, p. 433.

¹⁴Frederick D. Mott and Milton I. Roemer, Rural Health and Medical Care, New York: McGraw-Hill Book Co., Inc., 1948, pp. 75 and 80.

¹⁵Jaco, op. cit., p. 26.

¹⁶Norman G. Hawkins, Medical Sociology, Springfield: Charles C. Thomas, 1958, p. 93.

striking features of the comparative rural and urban patterns of illness is their similarity.¹⁷

In Table XIX are the pathology rates for the three communities included in the present study. Assuming that New Roads is the most rural community, Hammond is in transition, and Baton Rouge is the most urban, there is no remarkable difference in the overall perceived morbidity rates of the three. Hammond does have a slightly higher rate, but there is no indication of a rural-urban continuum influence. Addressing the individual categories of diseases, however, such a relationship may exist in alcoholism and neuroskeletalmuscular categories. In three other disease categories, upper respiratory, cancer and other infections and fevers, there tends to be a higher rate in the urban area.

Assuming that atypical social structure is conducive to anomie, at least to the extent that it reduces the clarity with which norms are articulated, it would seem that the black race might be subjected to a greater amount of this type of structural anomie. This is logical because the black family tends to be partially dissolved at a higher rate than the white family. Also, many members of the black race continue to be denied entrance into the legitimate, visible modes of efficient goal achieving behavior patterns. Of course, other potentially pathogenic qualities are also related to racial and ethnic differences. Such qualities may include diet, life styles, and incomes.

Among established racial differences in morbidity rates,

¹⁷Mott and Rosen, op. cit., pp. 87-91.

TABLE XIX
 RATES OF PERCEIVED MORBIDITY FOR SELECTED DISEASE CATEGORIES AMONG THE MEDICALLY
 INDIGENT OF THE SAMPLE POPULATIONS IN A PREDOMINENTLY INDIGENT POPULATION
 FOR SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

DISEASE CATEGORY	SAMPLE POPULATIONS							
	South Baton Rouge N=885		Hammond N=736		New Roads N=547		Overall Total	
	N	%	N	%	N	%	N	%
Cardiovascular	145	16.4	102	13.9	96	17.6	343	14.7
Upper Respiratory	81	9.2	54	7.3	41	7.5	176	7.6
Allergy Reaction	129	14.6	124	16.8	68	12.4	321	13.8
Mental Illness & Retardation	75	8.5	62	8.4	62	11.3	199	8.5
Endocrine	30	3.4	25	3.4	21	3.8	76	3.3
Orthopedic Problems	68	7.7	87	11.8	56	10.2	211	9.1
Abdominal & Intestinal Injury and Disease	107	12.1	106	14.4	69	12.6	282	12.1
Cancer	25	2.8	11	1.5	8	1.5	44	1.9
Eye, Ear, Nose & Throat	91	10.3	94	12.8	63	11.5	248	10.6
Arthritis	97	11.0	93	12.6	63	11.5	253	10.6
Neuroskeletal & Muscular	31	3.5	22	3.0	13	2.4	66	2.8
Dental	2	0.2	6	0.8	1	0.2	9	.4
Alcoholism	7	0.8	2	0.3	0	0.0	9	.4
Other Infections & Fevers	58	6.6	21	2.9	15	2.7	94	4.0
TOTAL	946	106.9	809	109.9	576	105.3	2,331	107.5

hypertension, diseases of the heart, arthritis, and nephritis were found to be more prevalent in the Negro race in one study. In the same study of public assistance recipients, diabetes, cholecystitis, and psychoneurosis were found to have higher rates among whites.¹⁸ This is not entirely supported by a study of an urban population which found that age adjusted morbidity rates for heart disease indicated higher prevalence among whites. Also, in this study, diabetes rates were found to be higher in the black race. The two studies did agree on the rates of arthritis and mental disorders.¹⁹ Cancer rates have been found to be higher in the white race, but some authorities are reluctant to conclude a lower predisposition by Negroes. These authorities feel that the lower reported rate among Negroes may be due to shorter life expectancy, lower living standards, and less accurate diagnoses of the Negro.²⁰

Table XX reveals that, although the non-white race has an overall pathology rate higher than that of the non-ethnic identified population and the French ethnic population, it has a lower pathology rate than any other ethnic group except German. The miscellaneous ethnic group has the distinction of having the highest overall pathology rate, followed by the Italians. However, the size of each of these ethnic

¹⁸American Public Health Association, The Maryland Medical Care Program, New York: American Public Health Association, 1948, p. 84.

¹⁹Commission on Chronic Illness, Chronic Illness in the United States: Chronic Illness in a Large City, Cambridge: Harvard University Press, 1959, pp. 84 and 94.

²⁰Erwin Ackerknecht, History and Geography of the Most Important Diseases, New York: Hafner Publishing Co., Inc., 1965, p. 172.

TABLE XX
PERCEIVED MORBIDITY RATES AS SHOWN BY RACE AND ETHNIC IDENTITY IN A
PREDOMINENTLY INDIGENT POPULATION FOR SOUTH BATON ROUGE,
HAMMOND, AND NEW ROADS, 1971

DISEASE CATEGORY	RACE AND ETHNIC IDENTITY															
	Non		White													
	White		American		French		Italian		German		Other		Total		Grand	
	N=1691		N=286		N=126		N=20		N=15		N=18		N=470		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Cardiovascular	282	16.7	30	10.5	20	14.7	3	15.0	1	6.7	7	53.8	61	13.0	343	15.9
Upper Respiratory	129	7.6	31	10.8	10	7.4	1	5.0	1	6.7	4	30.8	47	10.0	176	8.1
Allergy Reaction	221	13.1	64	22.4	24	17.6	6	30.0	0	0.0	5	38.5	99	21.1	320	14.8
Mental Illness & Retardation	160	9.5	17	5.9	15	11.0	1	5.0	0	0.0	6	46.2	39	8.3	199	9.2
Endocrine	58	3.4	11	3.8	3	2.2	3	15.0	0	0.0	1	7.7	18	3.8	76	3.5
Orthopedic Problem	166	9.8	31	10.8	9	6.6	3	15.0	0	0.0	2	15.4	45	9.6	211	9.8
Abdominal and Intestinal	213	12.6	42	14.7	14	10.3	5	25.0	2	13.3	5	38.5	68	14.5	281	13.0
Cancer	29	1.7	9	3.1	3	2.2	2	10.0	0	0.0	1	7.7	15	3.2	44	2.0
Eye, Ear, Nose & Throat	199	11.8	28	9.8	14	10.3	2	10.0	0	0.0	4	30.8	48	10.2	247	11.4
Arthritis	209	12.4	22	7.7	11	8.1	6	30.0	0	0.0	5	38.5	44	9.4	253	11.7
Other Neuromuscular	57	3.4	5	1.7	4	2.9	1	5.0	0	0.0	0	0.0	10	2.1	67	3.1
Dental	7	0.4	1	0.3	1	0.7	0	0.0	0	0.0	0	0.0	2	.4	9	.4
Alcoholism	7	0.4	0	0.0	1	0.7	0	0.0	0	0.0	1	7.7	2	.4	9	.4
Other Infections & Fevoral	72	4.3	10	3.5	10	7.4	2	10.0	0	0.0	0	0.0	22	4.7	94	4.3
TOTAL	1,809	107.0	301	105.2	139	102.2	35	175.0	4	26.7	41	315.4	520	110.6	2329	107.8

groups is so small that generalizations about them are unwarranted. The non-white population of the present sample tends to have higher rates of cardiovascular diseases, mental illness and retardation, eye, ear, nose and throat disorders, and arthritis. It tends to have a lower rate of allergy reaction, upper respiratory diseases, abdominal and intestinal disorders and cancer.

Intuitively, it seems reasonable to assume that religion might exert an influence on morbidity, as religion may sometimes dictate certain behavior patterns which might, in turn, exert an influence on health. Table XXI gives a breakdown of perceived morbidity rates by religious affiliation.

The Jewish tend to have the lowest perceived morbidity rate among this sample. However, the small number of this group makes generalizations impossible. The highest rate is that of the Protestant groups with those groups defined as non-medically constrictive being the highest of even this category.

Income, too, is a condition which exerts a large influence on life style, including diet, sanitation, and preventive medical care. It might be expected, then, to have an influence on health. Table XXII shows this relationship.

The relationship between family income and overall morbidity is striking with an apparent tendency for morbidity rates to vary inversely with income. The pathology patterns found in this sample tend to conform to those found in other studies. Heart disease tends to be overrepresented in the very low income ranges, but is somewhat higher in

TABLE XXI
DIFFERENTIAL RATES OF PERCEIVED MORBIDITY AMONG AN INDIGENT POPULATION FOR
SELECTED DISEASE CATEGORIES AS SHOWN BY RELIGIOUS AFFILIATION IN A
PREDOMINENTLY INDIGENT POPULATION FOR SOUTH BATON ROUGE,
HAMMOND, AND NEW ROADS, 1971

DISEASE CATEGORY	RELIGIOUS AFFILIATION													
	Catholic		Jewish		Protestant		Non-Medically Con.Prot.		Medically Con.Prot.		None		Overall Total	
	N=620		N=8		Total		N=1418		N=78		N=22			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Cardiovascular	85	13.7	1	12.5	251	16.8	238	16.8	13	16.7	1	4.5	338	15.7
Upper Respiratory	49	7.9	0	0.0	124	8.3	119	8.4	5	6.4	3	13.6	176	8.2
Allergy Reaction	86	13.9	0	0.0	231	15.4	222	15.7	9	11.5	1	4.5	318	14.8
Mental Illness & Retardation	53	8.5	1	12.5	142	9.5	136	9.6	6	7.7	2	9.1	199	9.2
Endocrine	24	3.9	0	0.0	52	3.5	50	3.5	2	2.6	0	0.0	76	3.5
Orthopedic Problems	51	8.2	1	12.5	155	10.4	148	10.4	7	9.0	4	18.2	211	9.8
Abdominal & Intestinal Disease & Injury	65	10.5	1	12.5	212	14.2	201	14.2	11	14.1	2	9.1	280	13.0
Cancer	16	2.6	1	12.5	27	1.8	27	1.9	0	0.0	0	0.0	44	2.0
Eye, Ear, Nose & Throat	59	9.5	0	0.0	183	12.2	175	12.3	8	10.3	3	13.6	246	11.4
Arthritis	59	9.5	2	25.0	188	12.6	173	12.2	15	19.2	2	9.1	250	11.6
Neuroskeletal - Muscular	15	2.4	0	0.0	50	3.3	48	3.4	2	2.6	2	9.1	67	3.1
Dental	2	0.3	0	0.0	6	.4	6	.4	0	0.0	0	0.0	8	.4
Alcoholism	2	0.3	0	0.0	7	.5	7	.5	0	0.0	0	0.0	9	.4
Other Infections & Fevers	24	3.9	0	0.0	68	4.5	66	4.7	2	2.6	2	9.1	94	4.4
TOTAL	590	95.2	7	87.5	1696	113.4	1616	114.0	80	102.6	22	100.0	2316	107.5

TABLE XXII
RATES OF PERCEIVED MORBIDITY FOR SELECTED DISEASE CATEGORIES AS SHOWN BY
ANNUAL FAMILY INCOME IN A PREDOMINENTLY INDIGENT POPULATION FOR
SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

DISEASE CATEGORY	LEVELS OF INCOME									
	Under \$1,000 N=110	1,001- 2,000 N=441	2,001- 3,000 N=487	3,001- 4,000 N=246	4,001- 5,000 N=215	5,001- 6,000 N=144	6,001- 7,000 N=96	7,001- 8,000 N=133	Over 8,000 N=239	Overall Total
Cardiovascular	27.3	22.4	19.1	15.9	8.8	7.6	5.2	9.8	9.6	15.7
Upper Respiratory	11.8	10.0	6.8	8.1	10.7	6.3	6.3	4.5	7.5	8.1
Allergy Reaction	17.3	13.8	13.3	11.4	19.1	16.7	15.6	14.3	15.9	14.7
Mental Illness & Retardation	16.4	16.1	9.2	8.1	6.5	3.5	3.1	3.8	6.3	9.3
Endocrine	7.3	4.5	4.1	2.8	1.9	3.5	0.0	3.0	2.5	3.5
Orthopedic Problems	20.0	15.9	8.4	6.9	7.0	8.3	4.2	6.0	7.1	9.8
Abdominal & Intestinal Injury and Disease	15.5	17.5	12.1	13.8	12.1	11.1	6.3	8.3	10.0	12.8
Cancer	0.0	2.3	2.3	1.6	3.7	2.1	2.1	1.5	1.7	2.1
Eye, Ear, Nose & Throat	19.1	18.1	12.3	10.2	7.4	5.6	5.2	3.8	7.9	11.3
Arthritis	24.5	22.0	10.7	11.8	6.5	3.5	1.0	8.3	3.8	11.6
Neuroskeletal - Muscular	5.5	4.3	3.5	3.3	.5	2.1	4.2	2.3	2.1	3.1
Dental	0.0	.9	.2	0.0	.5	.7	0.0	1.5	0.0	.4
Other Infections & Fevers	5.5	3.2	2.3	2.4	7.9	6.3	8.3	7.5	4.2	4.3
Alcoholism	1.8	.2	0.0	.4	.9	.7	0.0	.8	.4	.4
TOTAL	171.8	151.2	104.3	96.7	93.5	77.8	61.4	75.2	79.1	107.2

the high income ranges than in the middle ranges. Mental illness tends to have a somewhat similar distribution while the rate of arthritis tends to vary inversely with income.

SUMMARY

Initially Durkheim approached anomie as a condition of social structure or, more specifically, as the anomic division of labor.²¹ Later, he demonstrated a relationship between this condition and certain behavior on the part of individuals, namely suicide. Other authorities extended the concept to include certain feelings within the individual. Thus, it appears established that anomie is a condition that exists simultaneously on both the social system and personality system level. This is not incompatible with the concept of interpenetration of systems and leads to the speculation that the condition might also be manifested on other system levels. It is the intent of this chapter to determine whether the existence of anomie at either the personality system level or the social system level is associated with a disruption of the homeostasis of the organismic system. Should this be the case, the loss of homeostasis may be the organismic system level manifestation of anomie.

Anomie at the personality system level has been operationalized by the Srole Scale. The relationship between anomie at this level and disruption of homeostasis at the organismic system level is explored through the following hypothesis expressed in the null.

²¹Emile Durkheim, The Division of Labor in Society, translated by George Simpson, New York: The Free Press, 1965, pp. 353ff.

Ho₁: There is no positive linear relationship between morbidity rates and anomie.

TABLE XXIII

OVERALL MORBIDITY RATES SHOWN BY LEVEL OF ANOMIE FOR A
PREDOMINENTLY INDIGENT POPULATION OF SOUTH BATON
ROUGE, HAMMOND, AND NEW ROADS, 1971

Level of Anomie							
0		1		2		3	
N	%	N	%	N	%	N	%
53	182.8	98	130.7	159	165.6	224	193.1

4		5		6		Total	
N	%	N	%	N	%	N	%
272	214.2	343	248.6	224	238.3	1,373	203.4

Level of measurement is ratio

Test statistic used is the Product-Moment Coefficient of Correlation

An r of $+0.871$ was obtained and this was found to exceed the .05 level of confidence using the F distribution.

Therefore, Ho₁ is rejected and the alternate hypothesis is accepted:

The overall morbidity rate is positively related to anomie.

Difficulty is encountered in exploring the relationship between anomie on the social system level and morbidity, as anomie on this level has not been quantified. Further complicating this task is the fact that anomie on the social system level may not be ubiquitous to all social systems. Consequently, it is possible that some individuals may be members of a variety of social systems some of which are anomic

and others of which may not be. To explore the relationship between social system anomie and illness, systems were selected ranging on a continuum of intimacy to the individual. Anomic conditions among these were then defined in qualitative terms based on the assumption that anomie on this level can be considered to be the breakdown of normative social structure. The social systems selected included: the family, the neighborhood, the church, and the community.

At the level of the family, it is recognized that the breakdown of norms can be manifested in a number of ways. However, it is assumed that a family in some stage of dissolution will tend to be more likely to be anomic than one with all positions filled. Operationally anomic prone families, then, are considered to be: families with a single parent, families without a natural parent and single adults. This relationship was tested by the following hypothesis, expressed in the null.

H₀₂: Members of families in which one or more positions are vacant do not tend to experience a higher morbidity rate than do those families with all nuclear positions filled.
Level of measurement is nominal.

TABLE XXIV
OVERALL MORBIDITY RATES SHOWN BY COMPLETENESS OF COMPOSITION IN A
PREDOMINANTLY INDIGENT POPULATION OF SOUTH BATON ROUGE,
HAMMOND, AND NEW ROADS, 1971

Family Composition*											
N=563		N=30		N=82		N=148		N=1,346			
Mother Only		Father Only		No Parent		Single Adult		Comple. Family		Total	
N	%	N	%	N	%	N	%	N	%	N	%
613	108.8	32	106.6	85	103.6	338	228.3	1,264	93.3	2,322	107.5

$\chi^2 < .001$

Test statistic used is Chi Square with the rejection range being .05 or less

A χ^2 of 61.62 was obtained. This is significant at less than the .05 level of confidence. Therefore, the H_0 is rejected and the alternate hypothesis is accepted;

Although the Chi Square Value is obtained is highly significant and the null hypothesis is appropriately rejected, the apparent strength of this value may be misleading because of the large N. To determine the strength of this relationship a contingency coefficient was run with a C value of .166 being obtained. This suggests that the tendency for members of incomplete families to experience higher rates of morbidity is not particularly strong.

Some question arises as to the appropriateness of the use of the χ^2 test statistic with these data since the independence between the frequencies of the several disease categories is not insured, thus, threatening the possibility of an inflated χ^2 value. That is to say, a single individual may be a multiple pathology bearer causing him to be counted in more than one disease category. This apparently violates independentness of the sample. However, there are two conditions which tend to reduce this defect. First, the frequencies which are sought are not the frequencies with which individuals are found to appear in designated disease categories, but rather the frequencies with which the designated disease categories appear in specified populations. This being the case, independentness is violated only to the extent that one pathological condition might induce others. Secondly, this possibility was minimized, if not eliminated, by collapsing the pathology categories so that any multiple disease conditions which might bear an etiological relationship are counted in only one category. Thus, the resulting inflation of the χ^2 value is reduced and it was decided that

the use of this test statistic was not contraindicated.²²

It should be noted that X^2 is significant for each type of incomplete family structure. Another possible source of anomie occurs at the level of the family. This is the possibility that the norms may be made less clear to some individual members of the family. Thus, within the family constellation some members may be exposed to anomic structure while other members, because of some type of marginality, may be exposed to anomic conditions. In an effort to explore this, the parents were asked to designate which child they felt to be most unlike the rest of the family. Considering this to be the most atypical child and therefore, the one with the greatest likelihood to be marginal or, at least, related to differently by the other family members a comparison was made between the morbidity rates of such children and the rest of the children population as follows:

H₀₃: The overall morbidity rate of children is not positively associated with the quality of being "atypical."

TABLE XXV

OVERALL MORBIDITY RATES FOR ATYPICAL AND NORMAL CHILDREN IN A
PREDOMINANTLY INDIGENT POPULATION OF SOUTH BATON ROUGE,
HAMMOND, AND NEW ROADS, 1971

Atypical N=138		Status of Child*		Total	
N	%	N	%	N	%
83	60.1	364	34.5	447	42.3

* $X^2 < .001$

²²This decision was made in conference with Prentiss E. Schilling, Associate Professor, Experimental Statistics, Louisiana State University, Baton Rouge, Louisiana, October 29, 1971.

Level of measurement is nominal.

Test statistic used is Chi Square with the rejection range of .05 or less.

A χ^2 value of 12.261 was obtained. This is significant at the .05 level of confidence. Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted: The overall morbidity rate of children is positively associated with the quality of being "atypical." A C value of .107 was obtained, indicating that this relationship is not strong.

Other situations in which members of an "intact" family structure might experience anomic conditions is in those instances in which a member of the family is forced to attempt to fill a position for which he has not been socialized and for which society does not communicate a set of norms to cover the deviance from the normal. The female head of household and male non-head of household are such positions. The relationship between morbidity and this type of anomie at the level of the social system is explored through the following set of hypotheses:

Ho₄: Morbidity rates are not significantly associated with the position of female head of household.

TABLE XXVI

OVERALL MORBIDITY RATES FOR HEAD OF HOUSEHOLD SHOWN BY SEX
IN A PREDOMINANTLY INDIGENT POPULATION OF SOUTH
BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

Head of Household					
Male N=330		Female* N=235		Total	
N	%	N	%	N	%
515	156.1	577	245.5	1,092	193.3

* $\chi^2 < .001$

Ho₅: The morbidity rate of the female head of household does not exceed that of the generally accepted female family position of wife of the head of household.

TABLE XXVII

OVERALL MORBIDITY RATES FOR ADULT FEMALES SHOWN BY HOUSEHOLD POSITION IN A PREDOMINENTLY INDIGENT POPULATION OF SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

Adult Female			
Head of Household* N=235		Nonhead of Household N=296	
N	%	N	%
577	245.5	508	171.6

* $\chi^2 < .001$

Ho₆: Morbidity rates are not significantly associated with the position of adult male non-head of household.

TABLE XXVIII

OVERALL MORBIDITY RATES FOR HUSBAND AND WIFE NON-HEAD OF HOUSEHOLD IN A PREDOMINENTLY INDIGENT POPULATION OF SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

Non-Head of Household*					
Husband N=19		Wife N=296		Total	
N	%	N	%	N	%
35	184.2	508	171.6	532	168.9

* $\chi^2 > .05$

Ho₇: The morbidity rate of the adult male non-head of household does not exceed that of the generally accepted male family position of head of household.

TABLE XXIX

OVERALL MORBIDITY RATES FOR HUSBANDS SHOWN BY HOUSEHOLD POSITION IN A PREDOMINENTLY INDIGENT POPULATION OF SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

Husbands*			
Head of Household N=330		Non-Head of Household N=19	
N	%	N	%
515	156.1	35	184.2

* $\chi^2 > .05$

Level of Measurement is nominal.

Test statistic used is Chi Square with the rejection range of .05 or less.

The following X^2 and C values were obtained:

Ho₄: 57.07 and .303

Ho₅: 35.31 and .249

Ho₆: .288 and .094

Ho₇: .115 and .054

All null hypotheses of this set, except Ho₆ and Ho₇ are rejected, the alter-hypotheses are accepted and it is assumed that high morbidity rates are associated with the atypical family position of female head of household. In the case of the male head of household, however, the association is not strong enough to produce a significantly higher morbidity rate than that found in the traditional role of female non-head of household or in the male non-head of household.

In addressing the effect that anomic neighborhood social structure might have on morbidity rates it is recognized that, perhaps, the most valid approach would be to determine the level of anomie existing within neighborhoods and compare this level with morbidity rates. There appears to be no readily available instrument with which to accomplish this however. The approach taken in this study is to assume that geographically mobile families should be less well integrated into the normative structure of the community and thus should experience greater anomie on the neighborhood level. Predicated on this primitive, the families in this study were classified by the number of moves that they had made carrying them into new neighborhoods during the past year and the number of moves was then correlated with the overall morbidity rates of the family members.

H₀₈: Overall morbidity rates are positively correlated with the number of interneighborhood moves made by a family.

TABLE XXX

OVERALL MORBIDITY RATES SHOWN BY GEOGRAPHIC STABILITY OF
FAMILIES IN A PREDOMINANTLY INDIGENT POPULATION OF
SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

Geographic Stability of Families*									
No Moves		One or Two		Three to Five		Over Five		Total	
N	%	N	%	N	%	N	%	N	%
1,196	199.3	194	153.9	61	169.4	10	250.0	1,461	190.7

$r = -.33 > .05$

Level of measurement is ordinal (since frequency of moves is expressed in unequal and in one case, open ended categories)

Test statistic selected is Kendall Rank Correlation Coefficient

A value of $-.33$ was obtained which is not significant at the $.05$ level of measurement. Therefore, the null hypothesis cannot be rejected and it must be concluded that the overall morbidity rate is not positively correlated with the number of interneighborhood moves made by a family.

Once the relationship of morbidity is extended beyond the level of the neighborhood two types of anomic conditions can be expected to exert an influence. One of these is the degree of anomie existing in the larger society. The other is the extent to which the individual is integrated into the larger social system. Addressing the latter condition first, it is not possible to measure this degree of integration at this time, but it is possible to select, a priori, those conditions that might mitigate such an integration and thus, prevent the individual from becoming a part of the normative social structure. Among such conditions might be a poverty of formal organization membership; low income, since much integration is purchased in our private enterprise

society, and race. The formal organizational membership available to all the subjects of this study is church membership. Assuming, then, that the extent to which individuals participate in this available organization integrate them, at least partly, into the normative structure of the community an effort was made to compare overall morbidity rates for active and non-active church attenders and church contributors.

H₀₉: Overall morbidity rates are not negatively associated with regular church attendance.

TABLE XXXI

OVERALL MORBIDITY RATES SHOWN BY QUALITY OF CHURCH ATTENDANCE
IN A PREDOMINENTLY INDIGENT POPULATION OF SOUTH BATON
ROUGE, HAMMOND, AND NEW ROADS, 1971

Quality of Church Participation*			
Regular N=1,761		Non-Regular N=381	
N	%	N	%
1,833	104	470	123

* $\chi^2 < .01$

H₀₁₀: Overall morbidity rates are not negatively associated with regular church contributions of time or money.

TABLE XXXII

OVERALL MORBIDITY RATES SHOWN BY QUALITY OF CHURCH CONTRIBUTION
IN A PREDOMINENTLY INDIGENT POPULATION OF SOUTH BATON
ROUGE, HAMMOND, AND NEW ROADS, 1971

Quality of Church Contribution*			
Active N=1,084		Inactive N=461	
N	%	N	%
1,766	105	538	117

* $\chi^2 < .001$

Level of measurement is nominal.

Test statistic is Chi Square and the rejection range of .05 or less.

A χ^2 value of 8.820 was obtained for H_{09} and 48.588 for H_{010} .

Both are significant at less than the .05 level of confidence.

Therefore, the null hypotheses are rejected and the alternate hypotheses are accepted. It is concluded, then, that overall morbidity rates are negatively associated with regular church attendance and the making of regular contributions of time or money to the church. The C values are .064 and .147 respectively.

In examining the relationship of overall morbidity rates and income the highest income range was dropped as it is, an open ended range.

H_{011} : There is no negative correlation between income range and overall morbidity rates.

TABLE XXXIII

OVERALL MORBIDITY RATES SHOWN BY LEVEL OF INCOME IN A
PREDOMINANTLY INDIGENT POPULATION OF SOUTH BATON
ROUGE, HAMMOND, AND NEW ROADS, 1971

Levels of Income*									
Under \$1,000		1,001- 2,000		2,001- 3,000		3,001- 4,000		4,001- 5,000	
N	%	N	%	N	%	N	%	N	%
189	171.8	667	151.2	508	104.3	238	96.7	200	93.5
5,001- 6,000		6,001- 7,000		7,001- 8,000		Over 8,000			
N	%	N	%	N	%	N	%		
112	77.8	59	61.4	100	75.2	189	79.1		

*Excluding the open ended category, $r = .9198 < .001$.

Level of measurement is interval.

Measure of correlation is the Product-Moment Coefficient of Correlation.

The measure of significance is the F distribution with the rejection range of .05 or less. An r value of -.9198 was obtained producing an F value of 63.29. This is significant at less than .001 level of confidence. Therefore, the null hypothesis is rejected and the alternate hypothesis accepted. Overall morbidity rates tend to vary inversely with the family income range.

In examining the relationship between race and morbidity it would seem reasonable to suspect that a member of any race denied entrance into the mainstream of social structure will suffer an anomic condition. Contemporary, liberal thinking suggests that Negroes suffer such a disadvantage. The Negro is constantly bombarded with messages depicting the desirable, ostensibly available material products of society yet frequently meets with failure when he attempts to qualify for these goods. It would appear, then that membership in the Negro race might be an anomic condition and, as such, might be associated with high morbidity rates. This supposition is somewhat strengthened by the high correlation between income and perceived morbidity since the Negro family tends to have a lower income than the white family.

This possible relationship is tested through the following null hypotheses:

Ho₁₂: There is not a positive relationship between membership in the Negro race and overall perceived morbidity.

TABLE XXXIV

OVERALL MORBIDITY RATES SHOWN BY RACE IN A PREDOMINANTLY INDIGENT POPULATION OF SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

Race*			
Non-White N=1691		White N=470	
N	%	N	%
1809	107.0	520	110.6

*X² < .001

Level of measurement is nominal.

Test statistic used is Chi Square with a rejection range of .05 or less.

A Chi Square value of 35.749 was obtained. This value is significant at the .05 level of confidence, but it is in the opposite direction of the hypothesis. Therefore, the null hypothesis cannot be rejected and it is concluded that there is no positive relationship between membership in the Negro race and morbidity.

It appears that perceived morbidity is significantly associated with anomie on a personality system level and on a social system level at the level of the family. Interneighborhood moves apparently are not associated with perceived morbidity while the quality of potential integration at a higher social system level is somewhat uncertain. Family income level is negatively correlated with perceived morbidity and church participation is negatively associated with perceived morbidity. Racial membership, however, does not appear to make a difference in terms of perceived morbidity. Although an attempt was made to relate perceived morbidity to anomie through these several variables, it is obvious that only on the level of the personality system is a direct measure of anomie used. At each of the other system levels the conditions ascribed to be anomic are complex and influence many areas of life style such as diet, sanitary conditions, and use of preventive health care practices, each of which may influence morbidity. Thus, where the null hypotheses are rejected, it cannot be concluded that the relationship is with anomie, but only that it is not incompatible with the existence of anomie.

These relationships can be depicted in the conceptional framework of system levels as follows:

FIGURE 2
 CONDITIONS AT THE SEVERAL SYSTEM LEVELS FOUND
 TO BE RELATED TO ILLNESS

At this point sufficient information is available to provide the first logical test for the system model developed in Chapter II. This is a cybernetic model. Consequently it is only when it is behaving, that is producing out-puts and adjusting to feed back, that all of the components are functioning. The data presented in this chapter does not permit an examination of the system in operation. If the proposed system model is viable, however, it must be demonstrated that there is a relationship between the system internal monitors. This is necessary because even when the system is not behaving toward

its environment it is still receiving stimuli from the environment. Since the internal monitors are assumed to influence each other stimuli received by each are ultimately transmitted to the others. Thus, pathogenic stimuli interpenetrating the organismic system monitor should disrupt the homeostasis of this system monitor, producing disease. This stress should, in turn, be transmitted to the personality system because of the interpenetration of the two systems. Stress in the personality system monitor is manifested by feelings of alienation. This stress, modifying the behavior of the individual personality systems, is transmitted to the social system structure. This transmission again results from the interpenetration of the two systems. The force of this stress on the social system ultimately results in a strain or distortion of social system structure. If this strain persists over time, alterations occur in the cultural system monitor.

Of course this transmission of stress does not always proceed in this direction. Simultaneously it may be emanating from each of the other system monitors and radiating in all directions. Applying the relationships determined to exist in this chapter to the proposed system model produces the paradigm appearing in diagram 3.

FIGURE 3

RELATIONSHIP OF CONDITIONS FOUND TO BE POSITIVELY
ASSOCIATED WITH MORBIDITY TO SYSTEM PARADIGM

If interpreted from the perspective of a micro social structure such as a family system, this diagram suggests that the pathogenic stimuli entering the family system produces disease in one or more of its members. The environment, then, has been monitored for potentially noxious stimuli to the organismic and such a stimuli has been detected. Ultimately the system will react to this stimuli. First, however, stress occurs in the personality system monitor. Our specific data indicate that disease detected by the organismic monitor is positively associated with feelings of anomie in the personality system monitor either as effect, necessary but insufficient cause, or both.

These feelings along with disease appear to be negatively related to income. Income is considered to be a parameter of the cultural system. It, itself, does not represent culture, but in a free enterprise society it represents a constraint on the quality of cultural stimuli to which the system may be exposed. The cultural system monitor provides an awareness of norms by which the symptoms (organismic monitor), the feelings (personality system monitor), and possible behaviors (internal and external system monitors) are perceived.

The internal system monitor and the external system monitor are comprised of the social structures of the system. A family system containing disease at the organismic level tends to be characterized by incomplete family structure and female head of the household. In the latter two instance it is this particular position which tends to also contain the pathology. In the case of the external system monitor it is necessary for some members of this social structure to maintain contacts with exogenous systems. These data indicate that a family system containing disease tends to be characterized by the diseased member participating in church only irregularly.

It appears that the proposed system model can accommodate the data presented in this chapter although it must be cautioned that it does not prove the model.

CHAPTER V

HEALTH CARE UTILIZATION BY A PREDOMINANTLY INDIGENT POPULATION

Normative Utilization

When a person is recognized as sick it is expected that he will seek competent medical treatment. In other words, he is expected to become an efficient health care consumer. With such an expectation of its members society must also have the responsibility to articulate acceptable health care consumer norms and to communicate them to its members in such a manner that all members of society have access to them. In our society this is accomplished through a variety of agents with some resulting inconsistency and confusion of articulated norms.

The church is one agent which attempts to define acceptable health care utilization behavior. A cursory examination of church doctrine reveals a wide apparent variation in the orientation of religions to health care. The Catholic Church has a rather extensive body of doctrinal statements related to medical practice. For the most part these statements seem to be aimed more at the Catholic health care provider than the Catholic health care consumer and are communicated through the Code of Ethical and Religious Directives for the Catholic Hospital Association. For the most part the specific directives appear to be based on the principles that direct killing of any innocent person, even at his own request, is always morally wrong and that every unborn child is considered as a human being with all the

rights of a human person from the moment of conception. The Catholic Church, then, exerts its greatest influence in those areas of medicine concerned with the reproductive process and with imminent death. However, this influence does not seem to be so much a restriction of health care methods and procedures as it does a prohibition on motive. As such, it does not appear to be incompatible with existing health care practice, including that of psychotherapy, which was approved by Pope Pius XII.

Divine healing continues to be recognized in church doctrine and is very prominent in the Catholicism of parts of the world outside the United States where the healing power attributed to some shrines has become legend. There is no indication, though, that Catholicism relegates contemporary, professional, health care practice to an inferior position to devine healing.

Among the protestant churches represented in this study the doctrine of the Baptist and Methodist Churches tends to take liberal and cooperative attitudes toward present day health care behavior. The adherents of these religions, as with most Protestant groups, believe that God works through the physician in response to prayer. They recognize that the Apostle Luke was a physician and that God, therefore, holds a place for the doctor in caring for the sick. Although these church doctrines reject the belief in the efficacy of relics they, historically, embraced faith healing. Today, this belief does not remain strong in either of these churches.

The doctrine of the Mormon Church, during the time of Brigham

Young, presented a very strong position against the use of professional medical care, preferring the laying on of hands and anointing with oil along with home remedies. The strength of this position has declined greatly since that time. Now the doctrine of this church accepts the use of physicians. It does remain the practice, however, to call upon the elders to lay their hands upon the head of the patient and give him a blessing before he goes into surgery, requesting that the Lord's healing influence might attend him and guide and direct the surgeons and others assisting in the operation.

Seventh-Day Adventists have no formal prohibition against any form of medical treatment and leave it up to each individual to choose his own type of treatment. They do not preclude treatment by therapists other than medical doctors. The belief in modern day miracle healing is rejected. Although there is no formal prohibition against any form of health care, the Seventh-Day Adventists, as a group, strongly oppose blood transfusions, hypnosis and psychotherapy.¹

Formally, the doctrine of the Pentecostal Churches rejected professional health care. Even today some ultra-conservative sects continue to reject such medical care. A rather typical statement from the doctrine of one of these sects is, "let the unbeliever, who knows not God and has not faith in Him, turn to the science of man but to us who know God these things are a curse."² The Pentecostal movement has

¹Richard T. Barton, Religious Doctrine and Medical Practice, Springfield: Charles C. Thomas, 1958, pp. 50-59, 65-67, 72-73, 75-76, and 77-79.

²H. Black, The Pentecostal Movement, New York: Humanities Press, 1964, p. 149.

also revived the custom of using arpons or handkerchiefs as a means of healing. Even more restricting of health care consumption than the Pentecostal Church is the Christian Scientist Church which offers a viable system of health care through the church.³

As significant as the church's potential is in influencing the norms of health care utilization it is far from being the only such agent. Various patented medicines are advertised through the several mass media. Some marginal medical practitioners, such as the Chiropracter, may advertise through the media also, especially through the newspaper. Many of the cultural media may devote some attention to the norms of health care consumption. For example, novels, stories, and television and radio programs may include such content. Special agencies, such as the Departments of Public Welfare and Public Health, also provide the function of disseminating information regarding health care resource utilization to the potential consumer. Finally, the norms of health care utilization are often passed on by word of mouth from experienced consumers to potential consumers.

This variety of sources of information related to health care utilization probably results in a variety of expected behavior patterns. However, it seems to be generally accepted that the most desirable source of health care is the medical profession. Although there are numerous reasons for not using a medical doctor the extent to which this is the case is some indication of the degree of deviation from expected health care utilization.

³Richard T. Barton, op. cit., pp. 83-85.

Quality of Medical Doctor Utilization

Since the medical profession occupies such a prominent place in the provision of health care, it is appropos to begin the exploration of patterns of health care utilization with the patterns of use of the medical doctor. The first question that arises is whether there are some groups who enjoy an advantage in their relationship with the medical doctor. To gain insights into the nature of the relationship, the subjects in this sample were asked whether they felt that they had a particular medical doctor whom they could consider their family physician, the length of time since a member of their family last went to the doctor, whether this visit was to a physician located in the town in which they live, and the cost of this visit. These data were then tabulated by community, race, religion, family income and age.

There is speculation in the literature that many members of ethnic groups may avoid seeking medical care because they fear the manner in which they will be treated or because they feel that because of their ethnic identity the doctor will charge prices far beyond the normal costs.⁴ Several factors have been found to influence geographic differences in the utilization of medical doctors. One of the most important factors is the distribution of physicians, who in turn are influenced by the availability of hospitals and other medical facilities. These facilities are most readily available in the more populous areas.⁵ In view of these two relationships, it might be expected that

⁴Oscar N. Serbeen, Jr., Paying for Medical Care in the United States, New York: Columbia University Press, 1953, p. 215.

⁵Ibid., p. 217.

the rural Negro would experience the poorest relationship with the medical doctor. The data in Table XXXV do not entirely support this contention. In terms of cost the Hammond Community offers the greatest advantage to the Negro. In all other categories, the urban area, Baton Rouge, does apparently provide the most advantage for the Negro. However, it is not Hammond, the community in transition, but the more rural community, New Roads, which offers the second greatest advantage to the Negro.

In view of the influence that religion has been assumed to have on the perception of illness and health care, it is possible that it might also exert an influence on the utilization of health care resources including the physician. In Table XXXVI, data reflecting the relationship between quality of utilization of physicians and religious affiliation are presented.

It appears from these data that there is some difference in the quality of utilization of physicians among the various religions included in the sample. Because the number of subjects in the Jewish, None, and Other categories is so small it is impossible to make generalizations concerning them. This leaves only the Catholic, Non-medically Constricted Protestants and Medically Constricted Protestants. Among the members of these categories the Medically Constricted are the least likely to have a medical doctor with whom they relate closely enough to consider a family doctor. The Catholics are the most likely to have such a relationship. The Catholic religion is also the religious group whose members are the most likely to have family members

TABLE XXXV

QUALITY OF UTILIZATION OF MEDICAL DOCTORS OF A PREDOMINANTLY INDIGENT
POPULATION AS SHOWN BY COMMUNITY OF RESIDENCE AND RACE, 1971

GEOGRAPHIC AND ETHNIC COMMUNITY		Quality of Utilization of Family Physician																
		Use of Family M.D.				Length of Time Since Last Doctor Visit								Location of Doctor				Aver- age Cost of Visit
						1 day to 1 month		1 month to 3 months		3 months to 1 year		1 year to 5 years		over 5 years		In Town		
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
South	N=87	41	47.1	39	44.9	9	10.3	8	9.2	2	2.6	0	0	54	93.1	4	6.9	\$10.94
Baton	N=792	247	31.2	147	18.6	34	4.3	48	6.1	28	3.5	11	1.4	235	91.1	23	8.9	7.51
Rouge	N=879																	
	Total	288	32.8	186	21.2	43	4.8	56	6.4	30	3.4	11	1.3	289	91.5	27	8.5	
	N=187																	
	White	71	37.9	41	5.6	15	8.0	10	5.3	3	1.6	2	1.1	55	78.6	15	21.4	4.56
Hammond	N=547																	
	Non-White	75	13.7	74	13.5	42	7.7	47	8.6	14	2.6	19	3.5	82	42.9	109	57.3	4.38
	N=734																	
	Total	146	19.8	115	15.7	57	7.8	57	7.8	17	2.3	21	2.9	137	52.5	124	47.5	
	N=193																	
New	White	77	39.9	39	20.2	10	5.2	10	5.2	8	4.1	2	1.0	60	86.9	9	13.1	7.26
	N=352																	
Roads	Non-White	119	33.8	51	14.5	18	5.1	16	4.5	4	1.1	0	0.0	78	78.7	21	21.3	5.71
	N=545																	
	Total	196	35.9	90	16.5	28	5.1	26	4.8	12	2.2	2	.4	138	82.1	30	17.9	
Overall	Totals	630	29.7	391	13.5	128	5.9	139	6.4	59	2.7	34	1.5	564	75.7	181	24.3	

TABLE XXXVI
QUALITY OF UTILIZATION OF MEDICAL DOCTORS OF A PREDOMINANTLY INDIGENT POPULATION
OF SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS AS SHOWN BY RELIGIOUS
AFFILIATION, 1971

RELIGIOUS AFFILIATION	Quality of Utilization of Family Physician																	
	Use of Family M.D.		Length of Time Since Last Doctor Visit										Location of Doctor				Average Cost	
	Yes		1 day to 1 month		1 month to 3 months		3 months to 1 year		1 year to 5 years		over 5 years		In Town		Out of Town		of Visit	
			N	%	N	%	N	%	N	%	N	%	N	%	N	%		
N=620 Catholic	205	35.1	122	19.7	30	4.8	35	5.6	11	1.7	1	.1	172	86.5	27	13.5	\$ 7.15	
N= 8 Jewish	1	12.5	1	12.5	1	12.5	0	0	0	0	1	12.5	2	67.7	1	33.3	12.83	
N=1,479 Protestant																		
N=345 Non-Medically Constrictive	402	27.9	255	17.9	95	6.7	96	6.7	45	2.7	27	1.9	371	71.6	147	28.4	6.30	
N= 78 Medically Constrictive	11	14.1	7	8.9	4	5.1	6	7.6	2	2.5	4	5.1	16	69.6	7	30.4	10.07	
N=1,557 Total	413	26.5	262	17.5	99	6.6	102	6.8	47	3.1	31	2.0	374	73.3	150	26.7		
N= 22 None	3	16.4	7	31.8	1	4.5	1	4.5	0	0	0	0	6	66.7	3	33.3	6.50	
N= 8 Other	8	100.0	2	25.0	1	12.5	0	0	0	0	0	0	2	100.0	0	0	5.50	
Grand Total	630	27.3	383	17.8	128	6.3	138	6.4	58	2.7	33	1.5	556	75.4	181	24.6	6.68	

who have received recent medical care from a doctor while the members of the Medically Constricted groups are least likely. However, this latter group tends to pay the highest average cost per visit and to utilize out of town medical doctors at a higher rate. The members of the Catholic religion tend to use in-town medical doctors at a higher rate than either of the other two religious groups.

Morbidity rates are known to be related to age with a tendency to be high in the first years of life, minimal in the ages between 15-19, and to increase with advancing years. The average charge for medical care on a national basis falls along a curve which is only partly similar: the charges are lowest in the first years of life when morbidity rates are highest. However the charges are highest in the most advanced years when morbidity tends to increase again. Persons under the age of twenty years experience charges less than the average of those over twenty. The members of the age group between 25 and 34 experience charges about one third again as high as the average and those persons 65 years of age experience charges that are about twice as high as the average.⁶

It might be expected that if health care utilization is efficient its rate should follow the general morbidity curve. The data in Table XXXVII suggest that this is not the case in the sample drawn for this study.

⁶Paul A. Dodd and E. F. Penrose, Economic Aspects of Medical Services, Washington, D. C.: Graphic Arts Press, Inc., 1953, pp. 103-104.

TABLE XXXVII

QUALITY OF UTILIZATION OF MEDICAL DOCTORS AS SHOWN BY AGE IN A PREDOMINENTLY INDIGENT
POPULATION OF SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

AGE CATEGORY	Quality of Utilization of Family Physician																Average Cost of Visit
	Use of Family M.D.		Length of Time Since Last Visit to Doctor														
			1 day to 1 month		1 month to 3 months		3 months to 1 year		1 year to 5 years		over 5 years		In Town		Out of Town		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
N=268 0 - 5	22	8.2	21	7.8	10	3.7	7	2.6	2	0.7	0	0.0	24	60.0	16	40.0	\$ 4.70
N=302 5 - 10	13	4.3	14	4.6	4	1.3	10	3.3	3	1.0	2	0.7	17	57.6	14	42.4	5.97
N=267 10 - 15	14	5.2	10	3.7	4	1.5	1	0.4	3	1.1	3	1.1	12	38.7	9	62.3	7.10
N=229 15 - 20	45	19.6	36	15.0	7	2.9	5	2.1	3	1.3	2	0.8	39	73.6	13	26.4	6.43
N=165 20 - 25	70	42.4	39	23.5	15	9.0	20	12.0	7	4.2	1	0.6	62	75.6	20	24.4	7.10
N=117 25 - 30	44	37.6	32	27.4	11	9.4	8	6.8	3	2.6	1	0.9	43	78.2	12	21.8	6.84
N=88 30 - 35	43	48.8	29	30.7	6	5.7	8	9.1	5	4.5	1	1.1	41	91.1	8	8.9	8.03
N=82 35 - 40	43	52.4	20	23.2	4	4.9	9	11.0	3	3.7	3	3.7	32	30.0	8	20.0	7.23
N=81 40 - 45	38	46.9	19	23.5	6	7.4	3	3.7	3	3.7	1	1.2	22	71.0	9	29.0	7.67
N=68 45 - 50	36	52.9	19	27.9	7	10.3	7	10.3	1	1.5	1	1.5	30	81.1	7	19.9	5.95
N=97 50 - 55	39	40.2	28	29.5	5	5.3	14	14.7	5	5.3	4	4.2	45	80.4	11	19.6	7.00
N=59 55 - 60	26	44.0	19	30.5	3	5.1	3	5.1	2	3.4	2	3.4	21	70.0	9	30.0	3.38
N=84 60 - 65	45	53.5	30	33.3	12	14.3	7	8.3	8	9.5	2	2.4	48	81.4	11	19.6	6.23
N=80 65 - 70	49	61.2	26	32.5	15	18.8	13	16.3	0	0.0	3	3.8	48	84.2	9	15.8	6.42
N=162 70 - over	103	63.5	52	32.1	19	12.3	23	14.2	10	6.8	7	4.3	84	75.7	27	24.3	6.74
Total	630	29.3	394	63.6	118	14.1	141	16.9	58	7.0	33	4.0	568	77.1	183	32.9	

From these data it appears that, in general, the likelihood that the family member having made the most recent visit to a doctor did so within the past month increases with age. The highest average cost of doctor visits is found in the 30-35 year age group. There is a tendency for the very young person not to be identified with a family physician, while there is a stronger tendency for the age groups above 60 to have a family doctor. The members of the younger age groups, 0-15, tend to be more likely to utilize an out of town doctor than those of the higher age groups.

Since most health care must be purchased, the possibility of income influencing its quality must be considered. Table XXXVIII shows the relationship between income and the quality of medical doctor utilization.

First, looking at the average cost of doctor visits, it is fortunately noted that, in general, as the family income is lower so also does the average cost of doctors visits tend to be lower. One feature of these data is the fact that level of family income is seen to show a relationship with the use of a family doctor. Of those persons with an income of \$1,000.00 or less only 30.9 per cent use a physician which they identify as a family doctor. At the other end of the income range, however, over 42 per cent of the population with an income between \$7,000-8,000 use a family doctor. Actually all income ranges above the level of \$6,000.00 show a greater tendency than those below this level to use a family doctor. There is also a tendency for those persons with a family income of less than \$6,000.00, generally, to make

TABLE XXXVIII

QUALITY OF UTILIZATION OF MEDICAL DOCTORS AS SHOWN BY LEVELS OF INCOME IN A PREDOMINANTLY
INDIGENT POPULATION OF SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

LEVELS OF INCOME		Quality of Utilization of Family Physician																Average Cost of Visit
		Use of Family M.D.				Length of Time Since Last Visit to Doctor												
						1 day to 1 month		1 month to 3 months		3 months to 1 year		1 year to 5 years		over 5 years		In Town		
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
N=110																		
Under \$1,000	34	30.9	31	28.2	6	5.5	13	11.8	3	2.7	2	1.8	40	72.7	15	27.7	\$ 5.51	
N=441																		
1,001 - 2,000	141	32.0	91	20.6	34	7.7	41	9.3	20	4.5	17	3.9	124	61.7	75	37.3	3.61	
N=487																		
2,001 - 3,000	128	26.3	72	14.7	34	6.8	26	5.6	13	2.7	5	1.0	113	75.3	37	24.7	5.48	
N=246																		
3,001 - 4,000	66	26.8	42	17.1	14	6.1	10	4.1	8	3.3	3	1.2	64	83.1	13	16.9	5.40	
N=215																		
4,001 - 5,000	54	25.1	31	14.9	10	4.7	13	6.0	2	0.9	2	0.9	51	87.0	7	13.0	8.32	
N=144																		
5,001 - 6,000	31	21.5	23	16.0	11	7.6	3	2.1	4	2.8	1	0.7	24	57.4	18	42.6	6.16	
N= 95																		
6,001 - 7,000	30	31.3	13	13.7	6	6.3	4	4.2	1	1.0	1	1.0	22	88.0	3	12.0	10.50	
N=131																		
7,001 - 8,000	56	42.1	36	27.5	4	3.0	8	6.0	1	0.8	1	0.8	47	94.0	3	6.0	7.50	
N=239																		
Above 8,000	79	33.1	42	17.6	6	2.5	14	5.9	4	1.7	0	0.0	59	86.8	9	13.2	10.33	
Total	619	28.9	381	13.3	125	5.9	132	6.3	86	3.6	32	1.5	544	75.1	180	24.9		

greater use of out-of-town doctors. It is also notable that persons with an income in excess of \$7,000.00 tend to have a higher rate of recent visits to a medical doctor than do any of the persons in the lower income levels. Since persons in the lower income levels tend to have a higher morbidity rate, the tendency for persons in the upper income levels to show a higher rate of recent doctor visits suggests that some of the pathology of the lower income groups may go untreated. Another possibility exists, however. That is that members of lower income groups may tend to use community health caretakers other than medical doctors.

Tables XXXIX, XL, and XLI attempt to explore this above possibility. In Table XXXIX are data on the rate of use of various community caretakers by income range. These data were gathered by asking each member of the family who had decisional jurisdiction over the selection of community caretakers, which ones they went to first and then second. Since the number of such persons does not conform perfectly with the total number of subjects the percentages computed using the number of subjects as the base are not precise, but should provide a relatively valid measure.

These data do not support the belief that members of the lower income groups prefer to seek out community caretakers other than the medical doctor as a first effort in seeking medical care. Indeed, the members of the lower income ranges preferred to go to a medical doctor as a first or second choice more frequently than did the members in the higher income ranges. This is true when the income ranges above

TABLE XXXIX

RATE OF USE OF VARIOUS COMMUNITY CARETAKERS AS FIRST OR SECOND CHOICES BY PERSONS OF DIFFERENT INCOME RANGES IN A PREDOMINANTLY INDIGENT POPULATION OF SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

COMMUNITY CARETAKER	Income Range																		Total	
	N=110		N=441		N=487		N=246		N=215		N=144		N= 95		N=131		N=239			
	0 -		1,001-		2,001-		3,001-		4,001-		5,001-		6,001-		7,001-		over			
	1,000		2,000		3,000		4,000		5,000		6,000		7,000		8,000		8,000			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
No Response*	0	0.0	3	0.7	3	0.6	2	0.8	5	2.3	3	2.1	0	0.0	0	0.0	0	0.0	16	1.6
Medical Doctor	46	41.8	136	30.9	122	25.1	61	24.8	48	22.3	26	18.1	21	21.9	33	24.8	50	20.9	543	55.0
Friend or Neighbor	2	1.8	28	6.3	21	4.3	3	1.2	2	1.0	5	3.5	2	2.1	0	0.0	3	1.2	66	6.7
Spouse	5	4.5	9	2.0	26	5.3	7	2.8	7	3.3	7	4.9	14	14.6	14	10.6	13	5.4	102	10.3
Druggist	1	.9	1	0.2	2	0.4	0	0.0	1	0.5	0	0.0	0	0.0	0	0.0	0	0.0	5	.5
Relative	17	15.4	53	12.0	38	7.8	22	8.9	18	8.4	13	9.1	8	8.3	12	9.1	22	9.2	203	20.5
God	2	1.8	10	2.2	4	0.8	5	2.0	3	1.4	0	0.0	0	0.0	1	0.8	0	0.0	25	2.5
Other	2	1.8	12	2.8	4	0.8	2	0.8	1	0.5	3	2.1	2	2.1	0	0.0	2	0.8	28	2.8
Total	75	68.2	252	57.1	220	45.2	102	41.5	85	39.5	57	39.6	47	49.0	60	45.1	90	37.7	988	46.8

*Does not include persons without decisional jurisdiction for health care.

TABLE XL

RATES OF USE OF SELECTED COMMUNITY CARETAKERS DURING COURSE OF ILLNESS BY PERSONS
OF DIFFERENT INCOME RANGES IN A PREDOMINENTLY INDIGENT POPULATION
OF SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

COMMUNITY CARETAKER	Income Range																			
	0 -		1,001-		2,001-		3,001-		4,001-		5,001-		6,001-		7,001-		over		Total	
	1,000		2,000		3,000		4,000		5,000		6,000		7,000		8,000					
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Friend or Neighbor	12	10.0	59	13.4	34	7.0	23	9.3	15	7.0	11	7.6	6	6.3	8	6.0	15	6.3	183	34.3
Minister or Priest	6	5.5	36	8.2	20	4.1	7	2.8	8	3.7	7	4.9	3	3.1	7	5.3	9	3.8	103	19.3
Druggist	15	13.6	58	13.2	57	11.7	30	12.2	13	6.0	16	11.1	14	14.6	16	12.0	29	12.1	248	46.4
Total	33	30.0	153	34.7	111	22.8	60	24.4	36	16.7	34	23.6	23	24.0	31	23.3	53	22.2	534	25.3

TABLE XLI

RATE OF USE OF SELECTED COMMUNITY CARETAKERS BY PERSONS OF DIFFERENT INCOME
RANGES IN A PREDOMINENTLY INDIGENT POPULATION OF BATON ROUGE,
HAMMOND, AND NEW ROADS, 1971

COMMUNITY CARETAKER	Income Range																			
	0 -		1,001-		2,001-		3,001-		4,001-		5,001-		6,001-		7,001-		over		Total	
	1,000		2,000		3,000		4,000		5,000		6,000		7,000		8,000		8,000			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Faith Healer	0	0.0	5	1.1	3	.6	1	.4	2	.9	0	0.0	0	0.0	1	.8	0	0.0	12	1.2
Chiro- practor	0	0.0	4	.9	1	.2	1	.4	0	0.0	2	1.4	0	0.0	1	.8	3	1.3	12	1.2
Other	13	11.8	41	9.3	18	3.7	23	9.3	9	4.2	3	2.1	5	5.2	6	4.5	13	5.4	131	12.8
No One	50	45.5	219	49.7	199	40.9	70	28.5	84	39.1	65	45.1	32	33.3	62	46.6	87	36.4	868	84.8
Total	63	57.3	269	61.0	221	45.4	95	38.6	95	44.2	70	48.6	37	38.5	70	52.6	103	43.1	1,023	48.5

\$7,000.00 are contrasted with the levels below \$3,000.00. The informants in the upper income levels tended to turn to their spouse first at a higher rate than the members of the lower income levels did.

Because the data in Table XXXIX reflects desired behavior rather than actual behavior, an effort was made to explore the actual utilization of community caretakers. This was done by asking the subjects if they ever went to any one of several identified community caretakers. The responses to this item are recorded in Table XL.

These data provide a somewhat different configuration and, seemingly, suggest that the members of the lower income levels tend to utilize each of the community health caretakers at a higher rate than do the members of the income ranges above \$7,000.00. This finding seems to imply that the members of the lower income levels utilize a wider range of caretakers.

The above discovery offers one possible explanation of how the greater pathology of the lower income levels are accommodated to a lower frequency of medical doctor utilization. In an effort to expand this inquiry to include health care providers that were not anticipated in the enumeration of providers contained in the previously discussed item, the subjects were asked to give any other types of help which they might seek when they are sick. Table XLI contains the results of this query.

Only two additional types of providers were mentioned in response to the above query in significant numbers. These were faith healers and chiropractors, with members of the lower income groups being slightly

more inclined to utilize faith healers and members of the higher income ranges slightly more inclined to use the chiropractor. However, there is the possibility that the lower income group subjects may not be as sensitive to the distinction between the chiropractor and the medical doctor. Surprisingly few subjects tended to utilize these two health care providers, suggesting a rather sophisticated utilization of health care resources by the sample population.

It is entirely possible that influences other than level of income are associated with health care utilization. One of the most obvious constraints on such behavior is the existence of health care facilities. A wider variety of such facilities exist in urban areas than in rural areas. Consequently, regardless of the effectiveness with which health care consumption norms are articulated if the resources are not available the norms cannot be executed. This should lead to a different pattern of utilization between rural and urban areas, with urban residents tending to use more technologically sophisticated services and rural residents attempting to "make do" with the limited services available to them.

Table XLII shows the various sources of help to which the indigent populations of South Baton Rouge Neighborhood, Hammond, and New Roads turned to immediately for health care. These data are shown by race and were obtained from each member of the family having decisional jurisdiction over health care consumption. Since each person who responded to this item was asked to list the "two" sources of help that he would consult immediately upon becoming ill in the sequence that he

TABLE XLII

RATE OF USE OF VARIOUS COMMUNITY CARETAKERS AS FIRST OR SECOND CHOICE BY PREDOMINANTLY
INDIGENT POPULATIONS OF THREE COMMUNITIES SHOWN BY RACE, 1971

COMMUNITY CARETAKER	Communities															
	South Baton Rouge				Hammond				New Roads				Total			
	White		Black		White		Black		White		Black		White		Black	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
	N=87		N=792		N=187		N=547		N=193		N=352		N=467		N=1,691	
No Response	1	1.1	14	1.8	0	0.0	0	0.0	0	0.0	2	0.6	1	0.2	16	0.9
Medical Doctor	26	29.8	193	24.4	70	37.4	127	23.2	55	28.5	82	23.3	151	32.3	402	23.7
Friend or Neighbor	6	6.9	21	2.7	9	4.8	14	2.6	9	4.7	9	2.6	24	5.1	44	2.6
Spouse	11	12.6	22	2.8	14	7.5	30	5.5	13	6.7	14	4.0	38	8.1	66	3.9
Druggist	0	0.0	3	.4	0	0.0	2	.4	0	0.0	0	0.0	0	0.0	5	0.2
Relative	23	26.4	58	7.3	22	11.8	56	10.2	20	10.4	30	8.5	65	13.9	144	8.5
God	1	1.1	7	0.9	2	1.1	15	2.7	0	0.0	1	0.3	3	0.6	23	1.3
Other	2	2.2	9	1.1	3	1.6	9	1.6	2	1.0	4	1.1	7	1.4	22	1.3
Total	70	80.5	327	41.3	120	64.2	253	46.3	99	51.3	142	40.3	289	61.4	722	42.6

would consult them, the column totals represent the total number of frequencies with which all categories of caretakers were mentioned.

These data reveal that it is not in the most urban area that the most frequent use of the medical doctor is made as an initial source of health care. Instead, it is the community in transition that possesses this characteristic. In each community, however, the medical doctor was selected either as the first or second choice of health care provider at a much higher rate than any other health caretaker. The next most frequently listed caretaker was "relative," followed by "spouse," "friend or neighbor," "God," and "druggist" in all communities.

The differences between races is much greater than the differences between communities. The Negroes displayed a tendency to utilize the druggist and God at a higher rate than did the Whites. The Whites tended to utilize the spouse, relative, medical doctor, and friend or neighbor at a higher rate than did Negroes.

Table XLIII contains data on the rate of use of several community caretakers over the course of an illness.

Here we see that the rank order of the frequency of use of each of these caretakers is the same for the communities of South Baton Rouge Neighborhood and Hammond with the residents of each tending to use the druggist most, a friend or neighbor next most frequently and the minister or priest third most frequently for medical advice when they are ill. In New Roads, the most frequently used source of help is the friend or neighbor, the second most frequently used is the druggist

TABLE XLIII

RATE OF USE OF VARIOUS COMMUNITY CARETAKERS DURING COURSE OF ILLNESS BY THE
INDIGENT POPULATIONS OF THREE COMMUNITIES SHOWN BY RACE, 1971

COMMUNITY CARETAKER	Communities															
	South Baton Rouge				Hammond				New Roads				Total			
	White		Black		White		Black		White		Black		White		Black	
	N=87		N=792		N=187		N=547		N=193		N=352		N=467		N=1,691	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Friend or Neighbor	12	13.7	63	7.9	22	11.7	45	8.2	15	7.7	30	8.5	49	10.4	138	8.1
Minister or Priest	3	3.4	24	3.0	24	12.8	32	5.8	5	2.5	16	4.5	32	6.8	72	4.2
Druggist	12	13.7	91	11.4	28	14.9	76	13.8	21	10.8	19	5.3	61	13.0	186	10.9
Total	27	31.0	178	21.4	74	39.5	153	27.9	41	21.2	65	18.4	142	30.4	396	23.4

and, again, fewer subjects in this community tend to go to the minister or priest than any of the other of these several caretakers.

In terms of patterns of utilization of these several sources of help the people in the most rural community, New Roads, tended to turn to friends or neighbors at a much higher rate than the residents in the other two communities. The subjects in Hammond tended to make greatest use of the minister or priest, and the residents of South Baton Rouge Neighborhood tended to utilize the druggist at a higher rate than the residents of either of the other two communities. The difference between races in the utilization of these particular health care resources is not remarkable, as the rank order remains the same in each. It does appear that the Whites tended to utilize friends or neighbors, and ministers or priests at a somewhat higher rate while the Negroes tended to turn to the druggist at a higher rate than did the Whites. Of some interest is the fact that the rate at which the Negroes utilized the minister or priest in relation to the other two listed categories of caretaker tends to decrease progressively with the stage of urbanization of these three communities while the rate at which they turned to the druggist varied in the opposite direction. This latter condition is true of the Whites as well.

The responses to the item asking the subjects whether they ever use any other source of help when they are ill are tabulated in Table XLIV, by community and race.

According to these data the residents of the most rural community, New Roads, had the lowest rate of utilization of faith healers.

TABLE XLIV

RATE OF USE OF VARIOUS COMMUNITY CARETAKERS BY PREDOMINANTLY INDIGENT
POPULATIONS OF THREE COMMUNITIES SHOWN BY RACE, 1971

COMMUNITY CARETAKER	Communities															
	South Baton Rouge				Hammond				New Roads				Total			
	White		Black		White		Black		White		Black		White		Black	
	N=87		N=792		N=187		N=547		N=193		N=352		N=467		N=1,691	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Faith Healer	1	1.1	4	9.5	1	0.5	4	0.7	0	0.0	2	.5	2	0.4	10	0.5
Chiropractor	1	1.1	1	0.1	7	3.7	0	0.0	2	1.0	0	0.0	10	2.1	1	0.0
Other	13	25.2	51	6.4	9	4.8	22	4.0	9	4.6	29	8.2	31	6.6	102	6.0
No One	44	50.5	241	30.4	131	70.0	220	40.2	64	33.1	176	50.0	239	51.1	632	37.6
Total	59	67.8	297	37.5	148	79.1	246	44.9	75	38.8	207	58.8	282	60.3	750	44.3

The subjects residing in Baton Rouge used this resource at the highest rate of the three communities. However, this relationship is not so much due to the geographic difference, but to the fact that the Negroes tend to turn to this source of help and the sample drawn in Baton Rouge has the largest proportion of Negroes. The residents of Hammond tended to utilize the Chiropractor at a higher rate than did the residents of either Baton Rouge or New Roads. This practice is almost unique to the white members of the sample with only one black subject reporting such utilization.

Another interesting area to explore is the relationship of anomie to the utilization of health care resources. Intuitively it might be predicted that subjects with a low level of anomie will tend to present a higher rate of utilization of such resources as spouse and relative. This is true because anomie tends to be lower when there exists a viable family structure. Thus when anomie is low there is a greater probability that there are family members to call on. On the other hand, since anomie on an intrapersonal level is manifested by feelings of alienation, it is possible that those persons who are not in the mainstream of the health care system might be expected to be more likely to experience feelings of alienation, isolation, and rejection. If this is the case, then those subjects tending to think first about seeking treatment from the medical doctor when they are ill may also be expected to have a low level of anomie.

Table XLV gives the data obtained in the item asking who the subjects seek help from first or second when they feel ill. These

TABLE XLV

RATES OF USE OF VARIOUS CARETAKERS AS FIRST OR SECOND CHOICE BY PERSONS OF VARYING LEVELS
OF ANOMIE IN A PREDOMINANTLY INDIGENT POPULATION OF SOUTH BATON ROUGE,
HAMMOND, AND NEW ROADS, 1971

COMMUNITY CARETAKER	Anomie Level															
	0		1		2		3		4		5		6		Overall Total	
	N=29		N=75		N=96		N=116		N=127		N=138		N=94			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
No Response	0	0.0	3	4.0	2	2.1	0	0.0	1	0.8	3	2.2	3	3.2	12	1.8
Medical Doctor	20	68.9	49	65.3	73	76.1	88	75.9	87	68.5	94	68.2	59	62.8	470	69.6
Friend or Neighbor	1	3.4	4	5.4	5	5.2	10	8.6	9	7.1	15	6.8	8	8.5	52	7.7
Spouse	6	20.6	9	12.0	11	11.4	13	11.2	19	15.0	21	15.2	13	13.9	92	13.6
Druggist	0	0.0	0	0.0	0	0.0	2	1.8	0	0.0	1	0.7	1	1.1	4	0.6
Relative	13	44.8	20	26.7	13	13.5	29	25.0	40	31.5	32	23.2	22	23.4	169	25.0
God	0	0.0	2	2.7	3	3.1	1	0.9	7	5.5	7	5.0	3	3.2	23	3.4
Other	1	3.4	3	4.0	2	2.1	5	4.3	4	3.2	7	5.0	4	4.3	26	3.9
Total	41	14.1	90	12.0	109	11.4	148	12.8	167	13.1	180	13.0	113	12.0	848	12.6

data are broken down by levels of anomie.

These data bring out that those subjects with the lowest level of anomie tended to utilize these resources at a higher rate than those subjects with any other level of anomie. There was a slight tendency for those subjects with high levels of anomie to utilize the medical doctor at a lower rate than did those with a lower level of anomie. However, there was also a tendency for those subjects with the lowest two levels of anomie to turn to the medical doctor at a lower rate than did those subjects with the middle ranges of anomie. In the case of the spouse, the relationship is somewhat different with those subjects experiencing the lowest level of anomie showing the highest rate of utilization. Those subjects experiencing the two lowest levels of anomie also had a higher rate of utilization of a relative as either the first or second source of help to which they turned in the event of illness. There was a tendency for the rate of utilization of friends or neighbors to increase with the level of anomie. Also there was a tendency for the subjects with a low level of anomie not to turn to the druggist as an initial source of help in sickness while those with a high level of anomie did occasionally utilize this source.

When these subjects were asked whether they ever went to a friend or neighbor, a minister or priest, or a druggist for help when they were sick the response pattern was somewhat different than the response pattern to the previous item. Table XLVI shows the tabulation of these responses by levels of anomie.

From these data it appears that subjects with high levels of

TABLE XLVI

RATES OF USE OF VARIOUS CARETAKERS DURING COURSE OF ILLNESS BY PERSONS OF VARYING LEVELS OF ANOMIE IN A PREDOMINENTLY INDIGENT POPULATION OF SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

SELECTED COMMUNITY CARETAKERS	Anomie Level															
	0		1		2		3		4		5		6		Total	
	N=29		N=75		N=96		N=116		N=127		N=138		N=94			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Friend or Neighbor	8	27.6	12	16.0	21	21.9	25	21.6	29	22.8	41	29.7	22	23.4	158	35.1
Minister or Priest	1	3.4	7	9.3	11	11.5	9	7.8	18	14.2	22	15.9	13	13.8	81	18.0
Druggist	7	24.1	20	26.7	30	31.3	29	25.0	36	28.3	52	37.7	37	39.4	211	46.9
Total	16	55.2	39	52.0	62	64.6	63	54.3	83	65.4	115	83.3	72	76.6	450	66.6

anomie tended to resort to these resources over the course of their illness at a higher rate than did those with a low level of anomie. Since this is inconsistent with the rates observed in Table XLV in which the subjects with the higher rates of utilization tended to be those with the lowest levels of anomie, it appears that the subjects with the lowest levels of anomie may have been less inclined to desert their initially selected sources of help or to enlist additional help. Among these several resources, the subjects with higher levels of anomie tended to have higher rates of utilization for two of them, the minister or priest and the druggist. There was not a remarkable difference in the utilization of friends or neighbors.

Table XLVII shows that there was no notable differences in the patterns of utilization of the faith healer and chiropractor associated with high or low levels of anomie.

TABLE XLVII

RATES OF USE OF VARIOUS CARETAKERS BY PERSONS OF VARYING LEVELS OF ANOMIE
IN A PREDOMINENTLY INDIGENT POPULATION OF SOUTH BATON ROUGE,
HAMMOND, AND NEW ROADS, 1971

COMMUNITY CARETAKER	Anomie Level															
	0		1		2		3		4		5		6		Total	
	N=29		N=75		N=96		N=116		N=127		N=138		N=94			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Faith Healer	1	3.4	0	9.9	3	3.1	2	1.7	0	0.0	1	0.7	2	2.1	9	1.4
Chiropractor	0	0.0	1	1.3	1	1.0	2	1.7	0	0.0	1	0.7	1	1.1	6	.9
Other	6	20.7	8	10.7	8	8.3	12	10.3	20	15.7	22	15.9	20	21.3	96	15.1
No One	20	69.0	58	77.3	76	79.2	95	81.9	95	74.8	112	81.2	68	72.3	524	82.5
Total	27	93.1	67	89.3	88	91.6	111	95.6	115	90.5	136	98.5	91	96.8	635	94.0

Reasons for Use of Medical Care

At this point, it appears that there are some differences in the patterns of utilization of health care caretakers among various categories of the sample. The major effort of this chapter, however, is not to examine these differences in detail, but to examine the nature of the decision making process which precedes the utilization of health care resources. Since the medical doctor is by far the most frequently resorted to health caretaker by the subjects in this sample, he can be considered the key to entrance into the health care delivery system. The decision to enter this system, then, is usually initiated by a decision to visit a physician.

In an effort to gain some insight into how this decision is arrived at the system model described in Chapter II was used as a conceptual framework. It is assumed that the decision making process is a function of the interaction occurring within the family as a social system. However, if there is a quality of interpenetration of other system levels into the social system structure of the family then these too should influence the decision making process. The resulting configuration should be a clustering of reasons for either seeking the help of a medical doctor or not seeking such help. Such clusterings would result from the fact that influences on the decision that derive from the same system level tend to be more closely related to each other than to those influences arising from other system levels.

An attempt was made in this study to explore this possibility. To do this, the respondents were asked to select the symptoms from a prepared list which they considered to be serious enough to warrant

going to a physician. They were then asked whether they or anyone in the family under their decisional jurisdiction had had any of these symptoms during the past year. Those who did were asked if they or the symptomatic member of the family had, in fact, gone to the doctor. Those who did go to a physician were asked their reasons for going. These reasons were selected by the subjects from a list that was developed largely from Mechanic's "Triggers."⁷ Those who did not go to a physician, even though they had one or more symptoms that they considered serious enough to require medical attention, were asked their reasons for not going to a physician. The results of the latter group are tabulated in Table XLVIII, and shown in rank order of their rate of selection.

TABLE XLVIII
REASONS FOR NON USE OF MEDICAL DOCTOR BY SYMPTOM
BEARING PERSONS SHOWN BY RANK ORDER

Reasons	Frequency	Rate
Felt symptom was not serious enough	34	13.0
Was able to continue functioning	32	12.3
Lack of transportation	32	12.3
Could not afford to	27	10.3
Knew reasons for symptoms	26	10.0
Symptom was intermittent	21	8.0
Accustomed to feeling bad	18	6.9
Subject was told not to	17	6.5
Symptom ceased	16	6.1
Lack of confidence in health care system	13	5.0
Fear of discourteous treatment	10	3.8
Lack of time	7	2.7
Lack of knowledge of symptom	6	2.3
Discussed it with someone and decided against going	2	.8
Total	261	

⁷David Mechanic, Medical Sociology, New York: Free Press of Glencoe, 1968, pp. 130-31.

The most frequently mentioned reason for not going to a doctor was that the person did not feel the symptom was serious enough. Mentioned almost as frequently were the lack of transportation and the fact that the person felt he remained able to continue functioning. The most infrequently mentioned reasons were the lack of time and having discussed the possibility of going to the doctor and deciding against it.

The responses of the subjects who had gone to a medical doctor for the symptoms they experienced are recorded in rank order of their frequency of selection in Table XLIX.

TABLE XLIX
REASONS FOR USE OF MEDICAL DOCTOR BY SYMPTOM
BEARING PERSONS SHOWN BY RANK ORDER

Reasons	Frequency	Rate
Felt symptoms were serious enough	362	19.5
Felt that it would prevent more serious difficulty	357	19.2
The symptom persisted	355	19.1
Inability to continue functioning	252	13.6
Knew what the symptom meant	202	10.9
Discussed with someone and decided	120	6.5
Told to	106	5.7
It did not require much effort to go	72	3.9
It was easily affordable	33	1.8
Total	1,859	

Three reasons were offered at a considerably higher rate than others for the decision to utilize a medical doctor. These were the seriousness of the symptom, the possibility that it might become worse if allowed to continue, and the fact that the symptom did persist. The

most infrequently mentioned reasons for deciding to see a medical doctor were the affordability of the behavior and the convenience of utilizing the doctor.

To determine whether the responses to these items cluster at what might approximate system levels a factor analysis was run. Recalling the social system model suggested in Chapter II, four system levels should be expected to exist. These are: the organismic, the personality, the cultural and the social. Each of these system levels exists as a monitoring system within the social system. The social system monitoring system actually exists in two components, the internal system monitor and the external system monitor. To explore this condition the hypotheses become:

- H₁: The reasons for deciding not to seek medical care from a physician by the pathology bearing members of a family system will fall into four underlying factors approximating the four system levels.
- H₂: The reasons for deciding to seek medical care from a physician by the pathology bearing members of a family system will fall into four underlying factors approximating the four system levels.

In testing these hypotheses complications are encountered. Relying on verbal responses is tantamount to eliciting responses from a single system level. This is the personality system. Thus, the relationship of these responses to system levels other than the personality system is indirect and can be inferred only from the semantics of the statements. Such a condition raises the question of validity and reliability. Neither is considered to be a serious methodological problem in this instance. Validity, the quality of an instrument

measuring what it purports to measure, is not relevant because the hypotheses assume that this quality is not established. In fact, it is this quality that the hypotheses are designed to test. Reliability, consistency over time and between subjects, is not crucial because it is not the actual reason for seeking or not seeking medical care but the factors involved in the decision making process that is being explored.

The rotated factor matrix appears in Table L.

TABLE L

ROTATED FACTOR MATRIX OF REASONS FOR NOT SEEKING MEDICAL CARE

Measures	Factors					Communalities
	I	II	III	IV	V	
A	.89359	-.35492	-.11268	.21221	-.10393	.99301
B	-.03584	-.06784	.90301	.03711	-.04077	.82436
C	-.29121	-.04560	-.01151	-.10735	.78301	.71164
D	-.29466	-.15345	.24807	.02632	.64219	.58501
E	-.19360	.24211	.50867	-.07657	.23189	.41448
F	.30740	-.09339	.47732	-.05682	.45490	.54121
G	.77829	.16015	.14679	.04285	-.10441	.66567
H	-.02651	.62357	-.12394	.20288	.31705	.54658
I	-.86540	-.01874	.12163	.03068	.14017	.78466
J	-.92870	-.22845	.08414	.06679	.19900	.96581
K	.11533	.79874	.13770	.23839	-.31872	.82866
L	.08439	.96451	.03683	-.09297	-.21612	.99411
M	.00067	.03812	-.01539	.85251	-.33532	.84090
N	.06020	.15527	-.01934	.84555	.17634	.77416

From this rotated factor matrix the following factor compositions were decided upon:

Factor	Measure
I	A: Subject was told not to go to a medical doctor. G: Subject is accustomed to feeling bad.
II	H: No way to tell whether symptoms were serious K: Too difficult to arrange transportation. L: Could not afford medical care.
III	B: Talked it over with someone and decided against. E: The condition appeared to be going away by itself. F: The condition would go and come.
IV	M: Subject was afraid that he would not be treated well. N: Subject felt that it wouldn't do much good to go to the doctor.
V	C: Subject did not feel that it was important enough to seek medical care. D: Subject was still able to do the things that he needed to do. I: Subject couldn't take time off to seek medical care. J: Thought that he knew reason for the symptom.

It appears that the reasons for the decision not to go to the doctor reduce to five factors. This is one factor in excess of the number expected if the factors clustered around the several system levels. It also appears that each of the five factors contain measures relating to more than one system level. Factor I, for example, is composed of two measures. One, being told not to go to the doctor, appears to relate to social system level while the second, that the subject is accustomed to feeling bad, appears to more appropriately relate to the personality system level. However, when it is accepted that the measures contained in a factor are present together because they possess a common quality and this common quality is identified a different relationship emerges. These particular two measures suggest a passive, resigned abdication of decision making. This might be

thought of as a cultural quality. Taking this approach each of the factors might be described as follows:

Factor	Description
I	Passive, resigned abdication of decision making
II	Psychological defensiveness
III	Non-stressful symptom
IV	Distrust of the health care system
V	Family system not significantly affected

Describing the factors in this way it appears that Factor I is related to the cultural system, Factor II is related to the personality system, Factor III is related to the organismic system level, Factor IV is related to the social system level, and Factor V is also related to the social system level. There is a difference in Factors IV and V even though each is related to the social system level. This difference appears to be that Factor IV reflects a relationship external to the family while Factor V relates to the social system structure internal to the family. These findings cannot be considered incompatible to Hypothesis H_1 .

In examining the second Hypothesis only four factors were identifiable among those reasons given for deciding to seek treatment from a medical doctor. The rotated factor matrix appears in Table LI.

TABLE LI
ROTATED FACTOR MATRIX OF REASONS FOR SEEKING MEDICAL CARE

Measures	Factors				Communalities
	I	II	III	IV	
A	-.03642	.79589	.03372	-.03890	.63742
B	.14443	.68203	-.03944	-.01132	.48771
C	.52369	-.43090	.00453	-.16091	.48584
D	.64216	.18544	.10243	-.07137	.46235
E	.59456	-.14842	-.08133	.18622	.41682
F	.79353	.16089	-.01936	.05373	.65884
G	.01246	-.03585	.02995	.92755	.86269
H	.26382	.14967	-.69230	.36569	.70500
I	.20108	.09735	.81592	.25110	.77868

This rotated factor matrix produces the following factor compositions:

Factor	Measure
I	C: Felt symptoms were serious enough D: Knew symptoms were serious enough E: Could no longer function F: Symptoms would not let up
II	A: Told to go to doctor B: Talked it over and felt the need
III	I: Felt that it wouldn't cost too much
IV	G: Felt that it would save time in the long run H: Felt that it wouldn't require much effort

Seemingly four factors underly the reasons for deciding to go to a medical doctor. The first factor relates to the seriousness of the symptoms and, thus, represents the organismic system level. Factor II contains the item, "told to go," which was interpreted to imply a passive abdication of decision making in the decision not to go to a

doctor. However, in that decision this measure was combined with the subject's being resigned to feeling bad. In the decision to go to a doctor, it is combined with the measure, "talked it over with someone and decided on the need to go." In this context, it involves some degree of social interaction, although in a passive manner. This apparently indicates a suggestibility on the part of the subject and falls at the social system level. In Factor III, concern about the possible stress on the internal social system structure is indicated. The final factor is composed of two measures implying an effort to justify or rationalize the decision to go to the doctor. This appears to represent the personality system level.

In summary, the several factors underlying the decision to seek medical care from a physician may be described as follows:

Factor	Description
I:	Stressful symptom
II:	Suggestibility
III:	System concern
IV:	Justification

Again, these findings are not incompatible with the hypothesis. However, it cannot be assumed that these findings prove the stated hypotheses. Although the number of underlying factors associated with the decision to use or not to use the medical doctor, approximates the number of system levels, it is not possible to say with certainty that these factors do, indeed, represent these system levels. This uncertainty probably results from two sources. First, the observations used were verbal responses to schedule items. Verbal responses must, by their

nature, reflect the perception, thought processes, and communication processes of the personality system. At best then the responses can only reflect the personality system's perception and articulation of other system level influences. Secondly, the interpenetration of the several system levels precludes the existence of boundary integrity between the system levels. As a result diffusion must exist between these systems making it difficult to classify measures or factors at any one system level.

Summary

Health care resource utilization is a rather complex phenomenon reflecting multiple influences. The most frequently utilized health care personnel by the subjects of this study was the medical doctor. Differences were found in the quality of relationship between the medical doctor and various types of patients. The negro residing in the urban area of Baton Rouge tended to enjoy a better relationship than did the negro from the more rural areas of Hammond and New Roads. Religion, too, appeared to exert an influence on the quality of medical doctor relationship. As might be expected, the members of the medically constricted religions tended to visit the medical doctor less frequently than did members of other religious groups. Catholics tended to frequent the medical doctor at a higher rate than did members of the other religious groups and were the most likely to designate a family physician. On the other hand, the members of the medically constricted religions tended to pay higher fees and to visit out of town doctors.

Age and income also influenced the quality of medical doctor relationship. It appears that, although the members of the lower income groups expressed a stronger preference for the medical doctor as first treatment choice, they, in reality, tended to utilize a wider range of health caretakers and to utilize the medical doctor at a lower rate than did members of the upper socio-economic groups. The subjects from the rural areas tended to select a medical doctor as first treatment source at a higher rate than did those from the urban area. The differences in utilization patterns between members of the Black and White races appeared to be greater than that between residents of different geographic locations.

Anomie was also found to be related to health care resource utilization patterns. Those subjects with the lowest level of anomie tended to utilize health caretakers at a higher rate than did those with higher levels of anomie. However, there was a tendency for those subjects with a middle range of anomie to turn to a medical doctor at a higher rate than did either those with high levels or low levels of anomie. Subjects with a low level of anomie tended to turn to a spouse or relative at a higher rate. There was a tendency for those with higher levels of anomie to turn to a friend or neighbor at a higher rate. Subjects with lower levels of anomie appeared to be somewhat more loyal to their initially selected sources of help.

In examining the decision making process involved in deciding either to go to a medical doctor or not to go, a limited number of factors were found to be involved. These factors appear to be roughly

analogous to the several system levels. Relating them to the system model described in Chapter II, the following paradygm is obtained:

FIGURE 4
MEDICAL DOCTOR UTILIZATION PARADYGM

CHAPTER VI

ATTITUDE TOWARD HEALTH CARE FACILITIES

A number of definitions of attitude exist. W. I. Thomas suggests that an attitude is a process of individual consciousness which determines real or possible activity of the individual in the social world.¹ MacIver also saw attitudes as states of consciousness within a person with respect to objects.² For our purpose, however, an attitude may be defined as a relatively stable system of organization of the behavior displayed by a person toward a particular object or set of objects.³ To be useful the concept must be anchored by reference to some particular object or set of objects and must show direction. Since there is a tendency to organize behavior around attitudes it should be expected that a positive attitude toward an object would lead to the embracing of that object while a negative attitude should lead to the rejection of that object. Translated to health care facilities the implication is that those facilities toward which the consumer has a negative attitude should be rejected in favor of one for which the consumer has a positive attitude.

¹William I. Thomas and Florian Znaniecki, The Polish Peasant in Europe and America, Boston: Gorham Press, 1918, Vol. 1, p. 22.

²Robert M. MacIver, Society, New York: Farrar and Rhinehart, 1949, p. 24.

³John W. McDavidd and Herbert Harari, Social Psychology: Individuals, Groups, Societies, New York: Harper and Row, Publishers, 1968, p. 129.

There is a complication, however, factors other than consumer volition influence the selection of health care facilities. The public utility quality of many health care resources, for example, makes it impossible for the patient not to utilize them provided he cannot forego treatment altogether. Other factors such as age, income, and geographic location may also restrict freedom of choice of health care facilities at least to some extent. This eliminates the possibility of using health care behavior as an indication of consumer attitudes toward health care resources.

This condition actually increases the importance of examining attitudes toward health care resources in any exploration of health care patterns, for consumers who are forced to patronize facilities for which they have a negative attitude may be expected to become restive. This possibility may influence the extent to which consumers may remain loyal to existing health care resources.

In exploring attitudes toward health care facilities in this study the subjects were asked to name the most recent public hospital and private hospital which they had visited. They were then asked whether the care they received was poor, fair, or good. Their response to this item was assumed to be their attitude toward the care offered by that facility. It is recognized that this response actually represents an appraisal of a specific service. However, since the respondents usually have no way of making an objective evaluation of the quality of medical service received, it is assumed that their appraisal of this service is based on an attitude. The advantage of addressing

the subjects' response to a specific service rather than to diffused qualities of the facility is that it indicates to the client that he is not expected to make a technical evaluation and also serves to reduce noncommittal responses.

In our material society, it is sometimes assumed that a person is more inclined to value something if he has invested money in it. If this assumption is valid in the consumption of health care, then we might expect the most negative attitudes to be manifested toward charity hospitals; provided, of course, that other things remain equal. Any inequality that might be anticipated in other factors would intuitively be expected to produce a bias in favor of the private hospital. These conditions might include more attractive physical plant, less crowding, and better trained medical staffs, due to the use of externs and interns in the public hospitals. The contention that a person may feel more positive toward health care for which he has paid is supported by a study made in Baltimore. In this study it was found that clients in a medical care program for the indigent made wider use of physician services and reduced complaints following the replacement of a capitation method of payment with a fee-for service method. It was speculated that the decrease in clients' complaints was due to the freedom of choice conferred by the fee-for-service plan.⁴

In exploring the possibility that patients who pay for the health care that they receive may tend to have a more positive attitude

⁴C. A. Alexander, "Fee-for-Service Payments to Physicians Preferred," Public Health Reports, LXXXII (March, 1967), 192.

toward the care than those subjects who did not pay for their care, the hospitals utilized by the subjects of this study were divided into two groups. One was comprised of public general hospitals. The second group included the private general hospitals utilized by the subjects. The responses of the respondents to the question relative to their opinion of the care which they received were recorded as poor, fair, or good. Table LII presents these data tabulated by hospital and income range.

Contrary to the notion that people tend to value most highly that which they have paid for, these data suggest that there is no appreciable difference between the attitudes of the subjects who utilized the charity hospitals and those of the subjects who were patients at the private hospitals. The rate of "good" responses for the former subjects was found to be 82.8% while the rate of "good" responses for the latter subjects was 82.6%.

An interesting relationship is seen when the responses by income ranges are examined. In the case of the private hospitals, attitudes appeared to remain relatively constant over income ranges. However, the responses of the subjects who utilized the charity hospitals demonstrated a somewhat different pattern. The members of the lower and middle income ranges present an attitude equally positive with that of the private hospital users. In the income ranges above \$6,001, on the other hand, the attitude of the respondents toward the charity hospitals is much less positive than their attitude toward private hospitals.

TABLE LII

ATTITUDES TOWARD PUBLIC AND PRIVATE HOSPITAL CARE SHOWN BY RANGE OF INCOME IN A PREDOMINENTLY
INDIGENT POPULATION OF SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

	Mode of Health Care	Income																										Grand Total				
		Up to \$1,000			\$1,001 - 2,000			2,001 - 3,000			3,001 - 4,000			4,001 - 5,000			5,001- 6,000			6,001- 7,000			7,001- 8,000			Above 8,000						
		N=			5	6	32	13	20	152	8	14	111	2	6	51	1	5	27	5	4	26	1	1	6	1	2	4	5	1	8	P
		*P	F	G	P	F	G	P	F	G	P	F	G	P	F	G	P	F	G	P	F	G	P	F	G	P	F	G	P	F	G	
Public General Hospitals	Charity - New Orleans	0	3	12	3	4	58	2	5	47	2	2	16	0	0	15	1	2	8	1	0	1	1	2	1	3	1	3	13	19	161	
	Earl K.Long	3	1	4	2	3	20	1	3	15	0	1	7	1	2	7	0	0	1	1	0	1	0	0	0	1	0	2	9	10	57	
	Lallie Kemp	0	2	16	8	5	69	2	5	45	0	1	24	0	1	7	3	2	15	1	1	4	0	1	3	1	0	2	15	18	185	
	V.A. - Alexandria	0	0	0	0	0	3	1	0	4	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	3	0	18	
	Other	0	0	2	0	0	7	0	1	1	0	0	4	0	1	0	0	0	3	1	0	0	0	0	0	0	0	1	1	2	18	
	Sub-Total	3	6	34	13	12	157	6	14	112	2	4	51	1	4	30	5	4	27	5	1	6	1	3	4	5	1	8	42	49	439	
Private General Hospitals	Baton Rouge General	0	2	8	1	1	11	1	2	21	1	4	7	0	0	13	0	0	7	2	2	1	1	0	7	1	2	12	7	13	87	
	Dixon Memorial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0		
	Lane Memorial	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	2	0	5		
	Our Lady of the Lake	0	2	9	1	1	11	0	1	8	0	3	16	2	4	21	1	0	10	0	1	4	1	0	3	2	0	7	7	12	89	
	Pointe Coupee Gen'l.	0	0	0	1	0	12	0	0	16	0	1	5	0	0	4	0	0	3	0	0	3	1	0	1	0	2	12	2	3	56	
	Seventh Ward General	0	0	2	0	1	21	0	0	14	0	2	3	0	1	8	0	0	11	0	0	3	0	0	9	0	0	17	0	4	88	
	Woman's	0	0	2	0	0	1	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	2	7		
	Other	0	0	4	0	2	8	2	0	8	0	1	2	0	0	3	0	0	2	1	0	2	0	0	1	0	1	7	3	4	37	
	Sub-Total	1	4	25	4	5	65	3	4	68	1	11	35	2	5	49	1	0	33	3	3	13	3	0	24	3	7	57	21	39	369	
	Total	4	10	59	17	17	222	9	18	130	3	15	86	3	9	79	6	4	60	8	4	19	4	3	28	8	8	65	63	88	808	

*P=Poor; F=Fair; G=Good.

The above finding has some reinforcement in the literature. Rosenblatt, pointed out that it has been observed the urban poor tend to have a negative attitude toward the total societal health care delivery system. It is possible that this attitude develops because this class of consumers receive uniformly poor treatment. However, another possibility is brought out by Rosenblatt, who points out that these consumers may not be accustomed to the degree of impersonal care that they receive in the bureaucratic and complex, urban health care system.⁵ By negative implication this may mean that the more technological oriented middle class consumer might be expected to form a more positive attitude toward the more bureaucratic, aseptic, impersonal atmosphere of the private hospital. By the same token he might be expected to form a more negative attitude toward the less rigid, less formal atmosphere of the charity hospital with its lines of patients waiting for service. This possibility is consistent with the data in Table LII. On the other hand, Rosenblatt's explanation is inconsistent with the fact that the low income consumer had an equally positive attitude toward both the charity hospital and the private hospital.

The question arises, then, of whether Rosenblatt's finding is an artifact or, perhaps, a nuance of a circumscribed population. To explore this possibility the attitudes toward both charity and private hospitals were tabulated by geographic area. See Table LIII.

⁵Daniel Rosenblatt, "Barriers to Medical Care for the Urban Poor," in Arthur B. Shostah and William Gromberg (eds.), New Perspectives on Poverty, Englewood Cliffs: Prentice-Hall, Inc., 1965, pp. 69-76.

TABLE LIII
ATTITUDES TOWARD PUBLIC AND PRIVATE HOSPITAL CARE AMONG THE PREDOMINENTLY
INDIGENT POPULATION OF THREE COMMUNITIES, 1971

	Mode of Health Care	Attitudes by Community												Grand Total		
		Baton Rouge				Hammond				New Roads						
		Poor	Fair	Good	Total	Poor	Fair	Good	Total	Poor	Fair	Good	Total	Poor	Fair	Good
Public General Hospitals	Charity - New Orleans	5	13	59	77	4	5	46	55	3	1	62	66	12	19	167
	Earl K.Long	0	0	3	3	1	0	0	1	1	0	5	6	2	0	8
	V.A. - Alexandria	7	8	35	50	1	1	0	2	0	1	0	1	8	10	35
	Lallie Kemp	0	1	2	3	14	17	194	225	0	0	0	0	14	18	196
	Other	0	2	4	6	0	0	9	9	0	0	5	5	0	2	18
	Sub-Total	12	24	103	139	20	23	249	292	4	2	72	78	36	49	424
Private General Hospitals	Baton Rouge General	6	13	78	97	1	0	2	3	0	0	10	10	7	13	90
	Dixon Memorial	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0
	Lane Memorial	1	0	4	5	1	0	0	1	0	0	0	0	2	0	4
	Our Lady of the Lake	6	13	73	92	0	0	7	7	1	0	12	13	7	13	93
	Pointe Coupee Gen'l.	0	0	0	0	1	0	0	1	1	4	58	63	2	4	58
	Seventh Ward General	0	1	0	1	0	3	88	91	0	0	0	0	0	4	88
	Woman's	0	0	2	2	0	1	2	3	0	1	3	4	0	2	7
	Other	1	3	5	9	2	1	19	22	0	0	13	13	3	4	37
	Sub-Total	14	31	162	201	5	5	118	128	2	7	96	103	21	41	377
	Total	26	44	265	346	25	28	267	420	6	9	168	181	57	90	801

According to the tabulations in Table LIII , Rosenblatts' finding is replicated. In the present study the urban health care consumer did tend to form a more negative attitude toward both the public and private hospital as evidenced by the fact that the Baton Rouge sample manifested only a 74.1% "good" response for public hospitals and a 78.3% "good" response for private hospitals. At the other end of the rural-urban continuum, however, the New Roads sample showed a 93.2% "good" response for public hospitals and a 92.3% "good" response for private hospitals. Hammond, the transition community, showed 85.3% and 92.1% "good" responses respectively. From this finding we cannot say that the urban poor, health care consumer is reacting against the bureaucratic, aseptic environment because they are lower class and react to the impersonality of the hospital. The data in Table LII contradict such a premise. It is apparent, though, that the urban health care consumer did present a more negative attitude.

Another area of interest in exploring attitudes toward health care facilities is the relationship between age and attitudes. Much attention has been directed, especially in the current, popular literature, to the lack of confidence which many of the youth in our society have in the "establishment" and with the adults who are identified with the establishment. In view of this, the question must be raised whether this lack of confidence extends to the health care delivery system and, if it does, then to what age limit does this lack of confidence extend.

A review of the literature failed to shed any light on this question. In fact the single study found indicated that it was the

older people (65 years and over) who indicated some dissatisfaction with treatment from medical doctors. It is uncertain whether this dissatisfaction resulted from experiences or from stereotyped beliefs.⁶ No studies were found addressed to the relationship of age to attitudes toward hospitals.

To gain some understanding of this relationship the responses to the items eliciting attitudes toward both public and private hospitals were tabulated by age ranges and presented in Table LIV. The lowest age range considered was the 15-25 year range. Below this age most of the attitude responses were proxy responses by the parent.

It appears from these responses that there is a tendency for the subjects in the age ranges between 15 years and 35 years to have a less positive attitude toward public hospitals than any other age groups. A similar relationship does not obtain for attitudes toward private hospitals. Unlike the study cited by Shanas, the present data seemingly suggest that the older age groups, that is over 55 years, tend to have positive attitudes toward both the public and private hospitals.

Table LV, provides information of relationship between race and attitude toward health care.

There appeared to be a slight tendency for the Negro population to have a stronger, positive attitude toward hospital care. The tendency, though, is slight and does not obtain at all for private hospitals.

⁶Ethel Shanas, "Family Relationships of Older People," New York: Health Information Foundation Research Series 20, 1961, pp. 60-61.

TABLE LIV

ATTITUDES TOWARD PUBLIC AND PRIVATE HOSPITAL CARE SHOWN BY AGE RANGE IN A PREDOMINENTLY
INDIGENT POPULATION FOR SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

	Mode of Health Care	Age in Years: Top of Range is Exclusive																					
		15-25			25-35			35-45			45-55			55-65			Over 65			Total			
		*P	F	G	P	F	G	P	F	G	P	F	G	P	F	G	P	F	G	P	F	G	
Public General Hospitals	Charity - New Orleans	2	2	8	1	3	10	0	2	21	5	1	20	0	4	28	3	6	68	11	18	155	
	Earl K.Long	0	4	16	1	3	12	1	0	6	1	0	7	2	0	4	1	0	7	6	7	52	
	Lallie Kemp	2	5	28	1	8	23	1	1	18	2	0	30	0	0	19	2	1	28	8	15	146	
	V.A. - Alexandria	0	0	0	0	0	0	0	0	1	1	0	1	0	0	1	1	0	5	2	0	8	
	Other	0	1	2	0	0	1	0	0	2	0	0	3	0	1	5	0	0	4	0	2	17	
	Sub-Total	4	12	54	3	14	46	2	3	48	9	1	61	2	5	57	7	7	112	27	42	378	
Private General Hospitals	Baton Rouge General	3	3	14	1	2	10	3	2	17	0	1	5	0	2	14	0	2	22	7	12	82	
	Dixon Memorial	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	
	Lane Memorial	1	0	2	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2	0	4	
	Our Lady of the Lake	1	2	16	0	1	15	1	3	13	0	2	15	0	1	9	1	1	13	3	10	81	
	Pointe Coupee Gen'l.	0	1	5	0	2	11	0	0	5	2	1	7	0	0	5	0	0	17	2	4	50	
	Seventh Ward General	0	1	19	0	0	16	0	0	8	0	0	10	0	1	8	0	1	19	0	3	80	
	Woman's	0	0	3	0	0	2	0	1	0	0	0	1	0	0	0	0	0	1	0	1	7	
	Other	1	2	7	0	0	3	0	0	4	2	0	4	0	1	6	0	1	8	3	4	32	
	Sub-Total	6	9	66	2	5	58	4	7	47	4	4	43	0	5	42	1	5	80	17	35	336	
	Total	10	21	120	5	19	104	6	10	95	13	5	104	2	10	99	8	12	192	44	27	714	

*P=Poor; F=Fair; G=Good.

TABLE LV
ATTITUDES TOWARD PUBLIC AND PRIVATE HOSPITAL CARE SHOWN BY RACE AND ETHNIC GROUP IN A
PREDOMINANTLY INDIGENT POPULATION FOR SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

	Mode of Health Care	Attitudes																								Grand Total		
		Negro						White																				
		*P	F	G	P	F	G	P	F	G	P	F	G	P	F	G	P	F	G	P	F	G	P	F	G			
<u>Public General Hospitals</u>	Charity - New Orleans	7	19	149	3	0	11	0	0	5	0	0	0	0	0	0	2	0	2	5	0	18	17	19	185			
	Earl K.Long	8	7	53	0	3	5	0	0	1	0	0	0	0	0	0	0	0	1	0	3	6	8	13	66			
	Lallie Kemp	11	17	168	3	0	18	0	0	3	0	0	7	0	1	0	0	0	0	3	1	28	17	19	224			
	V.A. - Alexandria	1	0	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3	0	8			
	Other	0	2	12	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	2	24			
	Sub-Total	27	45	391	7	3	40			9	0	0	7	0	1	0	2	0	3	9	4	58	45	53	507			
<u>Private General Hospitals</u>	Baton Rouge General	4	13	78	3	0	7	0	0	4	0	0	1	0	0	0	1	0	0	0	0	0	8	13	90			
	Dixon Memorial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0			
	Lane Memorial	1	0	4	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	3	0	5			
	Our Lady of the Lake	4	13	74	2	0	9	1	0	3	0	0	1	0	0	2	1	0	3	0	0	0	8	13	92			
	Pointe Coupee Gen'l.	1	4	29	1	0	10	0	0	18	0	0	0	0	0	0	1	0	1	0	0	0	3	4	58			
	Seventh Ward General	0	2	36	0	2	45	0	0	2	0	0	2	0	0	1	1	0	0	0	0	0	1	5	86			
	Woman's	0	1	1	0	0	5	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	1	2	7			
	Other	2	2	15	1	2	16	0	0	4	0	0	2	0	0	0	1	0	0	0	0	0	4	4	37			
	Sub-Total	12	35	237	8	4	92	1	1	33	0	0	6	0	0	3	8	1	4	17	6	138	29	42	375			
	Total	39	80	628	15	7	132	1	1	42	0	0	13	0	1	3	10	1	7	26	10	196	74	95	882			

*P=Poor; F=Fair; G=Good.

Another characteristic that may be expected to influence attitudes toward hospital care is anomie. No studies were found in the literature that brought out a direct relationship between anomie and attitudes toward hospital care. One study was found that did bring out a rather indirect relationship. In this study, reported by Rosenblatt and Suchman, four vocational categories were delineated. Two were blue collar. These were operatives and kindred workers and domestic and service workers. The remaining two categories were white collar occupations, including professional, managers, and officials; and clerical and kindred workers. Members of all categories were administered an attitude test, in which the blue collar workers scored higher with regard to skepticism of medical care.⁷ If we assume that the members of the blue collar categories in this study represent the group with the highest level of anomie then it appears that there may be a negative relationship between level of anomie and strength of positive attitudes toward health care.

Although there is some merit in making this assumption, the data collected in this study permit a quantitative exploration of this relationship. Table LVI contains these data.

It can be seen that for the public hospitals there is a distinct tendency for those subjects experiencing a lower level of anomie to be more likely to have a positive attitude toward hospital care. It also

⁷Daniel Rosenblatt and Edward A. Suchman, "Blue-Collar Attitudes and Information Toward Health and Illness," in Arthur B. Shostak and William Gomberg, op. cit., pp. 325-29.

ATTITUDES TOWARD PUBLIC AND PRIVATE HOSPITAL CARE SHOWN BY LEVEL OF ANOMIE IN A PREDOMINANTLY
INDIGENT POPULATION FOR SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

	Mode of Health Care	Anomie																									
		0		1		2		3		4		5		6		Total											
		*P	F	G	P	F	G	P	F	G	P	F	G	P	F	G	P	F	G	P	F	G	P	F	G		
Public General Hospital	Charity - New Orleans	0	0	5	0	0	9	1	0	14	3	0	14	1	2	24	1	5	28	1	2	23	7	9	117		
	Lallie Kemp	0	0	3	0	0	7	0	2	12	1	2	22	1	1	29	2	5	23	2	3	13	6	13	109		
	Earl K.Long	0	0	2	0	0	5	1	1	4	1	1	4	0	0	9	3	3	9	1	1	8	6	6	41		
	V.A. - Alexandria	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	3	0	0	1	1	0	6		
	Other	0	0	0	0	0	1	0	0	3	0	0	1	0	1	2	0	0	2	0	0	1	0	1	10		
	Sub-Total	0	0	10			22	2	3	34	5	3	41	2	4	65	7	13	65	4	6	46	20	29	283		
Private General Hospital	Baton Rouge General	0	0	6	0	1	6	1	1	10	1	1	13	1	2	9	1	3	12	2	0	10	5	8	66		
	Dixon Memorial	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0		
	Lane Memorial	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	2	0	1		
	Our Lady of the Lake	1	1	4	1	1	3	0	1	5	1	2	9	0	1	11	1	2	14	0	1	11	4	9	57		
	Pointe Coupee Gen'l.	0	0	0	0	1	6	0	0	7	0	1	9	0	0	6	1	1	7	0	0	2	1	3	37		
	Seventh Ward General	0	0	2	0	0	6	0	0	8	0	1	7	0	1	8	0	1	14	0	0	0	0	3	45		
	Woman's	0	0	0	0	1	3	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	1	6		
	Other	1	1	1	0	1	4	0	0	5	1	1	0	0	0	5	0	1	3	1	0	5	2	4	23		
	Sub-Total	2	2	13	2	5	28	1	2	36	3	6	39	1	5	40	4	7	51	3	2	28	14	29	235		
Total		2	2	23	2	5	50	3	5	70	8	9	80	3	9	105	11	20	116	7	8	74	34	58	518		

*P=Poor; F=Fair; G=Good.

appears that there is a slight tendency for this likelihood to vary inversely with the level of anomie. In the case of the subjects utilizing private hospitals it is difficult to detect such a relationship.

One final potential influence on attitudes that should be explored is that of type of payment. This is an area of increasing concern in the health care field, as rising costs are forcing attention to be directed to the consideration of alternate plans for payment of hospital fees. As mentioned earlier there is some indication that the authors of the fee-for-service plan inaugurated in Baltimore's medical care program speculated that the reduction in complaints may have been due to the freedom of choice conferred by the plan.

To gain some understanding of the relationship between method of payment and attitude toward hospital care among the subjects in this sample, a questionnaire item was designed to determine how the costs of the subjects' latest hospitalization were paid. The responses from approximately 200 subjects included in the pretest of the instrument were collapsed into nine categories. These categories are: employer, insurance, cash, medicine, none, welfare, cash and medicare, cash and insurance, and cash and welfare. Responses to the item on the final schedule were recorded by a code indicating the most appropriate "method of payment." This information is found in Table LVII.

Since only one subject responded to the types: cash and medicare and cash and insurance in both the private hospital and public hospital categories, these responses were discarded. Examining the remaining payment types, it is seen that cash is the type of payment associated with

TABLE LVII

ATTITUDES TOWARD PUBLIC AND PRIVATE HOSPITAL CARE SHOWN BY MANNER OF PAYMENT IN A PREDOMINANTLY
INDIGENT POPULATION FOR SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS, 1971

Hospitals	Manner of Payment																														
	Employer Insurance						Cash			Medicare				None			Welfare			Cash & Medicare			Cash & Insur.			Cash & Welfare			Total		
	*P	F	G	P	F	G	P	F	G	P	F	G	P	F	G	P	F	G	P	F	G	P	F	G	P	F	G	P	F	G	
Public Hospitals																															
Charity - New Orleans	1	2	0	1	1	1	1	0	1	0	2	7	8	13	154	1	1	0	1	0	1	0	0	0	0	0	0	1	13	19	165
Earl K. Long	0	1	0	1	1	0	0	0	3	0	0	2	6	6	54	1	1	1	0	0	0	0	0	0	0	0	0	0	8	9	60
Lallie Kemp	0	0	1	0	0	2	0	0	3	0	0	2	14	16	184	0	2	2	0	0	0	0	0	0	0	0	0	14	18	194	
V.A.-Alexandria	1	0	1	0	0	0	0	0	0	0	0	0	1	0	7	0	0	0	0	0	0	0	0	0	0	0	0	2	0	8	
Other	0	0	0	0	1	1	0	0	1	0	0	0	0	1	15	0	0	1	0	0	0	0	0	0	0	0	0	0	2	18	
Total Public	2	3	2	2	3	4	1	0	8	0	2	11	29	36	414	2	4	4	1	0	1	0	0	0	0	0	1	37	48	445	
Private Hospitals																															
Baton Rouge General	0	0	7	1	3	18	4	6	40	0	1	6	1	0	3	1	1	2	0	0	4	0	2	8	0	0	1	7	13	89	
Dixon Memorial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	
Lane Memorial	1	0	0	0	0	2	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	2	0	5	
Our Lady of the Lake	2	2	8	0	2	16	4	5	41	0	0	4	0	1	2	0	0	0	0	0	3	1	3	15	0	0	0	7	13	89	
Pointe Coupee General	1	0	4	0	0	10	0	3	20	0	0	7	0	0	1	1	0	0	0	0	4	0	1	12	0	0	0	2	4	58	
Seventh Ward General	0	0	1	0	1	35	0	2	27	0	0	7	0	0	5	0	0	1	0	0	4	0	1	8	0	0	0	0	4	88	
Woman's	0	0	1	0	1	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	6		
Other	0	0	2	1	1	11	2	2	19	0	0	1	0	0	1	0	0	0	0	0	2	0	1	1	0	0	0	3	4	37	
Total Private	4	2	23	2	8	92	10	19	152	0	1	25	1	1	12	3	1	3	0	0	18	1	9	46	0	0	1	21	41	372	
Grand Total	6	5	25	4	11	96	11	19	160	0	3	36	30	37	426	5	5	7	1	0	19	1	9	46	0	0	2	58	89	817	

*P=Poor; F=Fair; G=Good.

the highest rate of positive attitude for public hospitals while medicare is the type of payment associated with the highest rate of positive response for private hospitals. Insurance is associated with the lowest rate of positive response for public hospitals and welfare is associated with the lowest rate of positive response for private hospitals.

The relative rank of the various types of payments in relation to their association with rates of positive attitude toward hospital care can be accomplished by examining their rank order. This rank order for both private and public hospitals is presented in Table LVIII.

TABLE VIII
TYPE OF PAYMENT FOR HOSPITAL CARE SHOWN IN RANK ORDER
FOR PRIVATE AND PUBLIC HOSPITALS

Private Hospital	Public Hospital
1. Medicare	1. Cash
2. Insurance	2. No payment
3. Cash	3. Medicare
4. No payment	4. Welfare
5. Cash and Insurance	5. Employer
6. Employer	6. Insurance
7. Welfare	

These rank order listings do not reveal a logical order. In the private hospital list medicare, insurance, and cash occupy the three highest ranks while the combination of cash and insurance unexpectedly falls to the fifth rank. No payment occupies the fourth rank. However, payment by the employer, which must resemble "no payment" more than cash and insurance do, rests at sixth place. One

possible intuitive explanation for this arrangement of ranks is that the first three ranks include payment types which suggest a quality of economic independence. The fifth rank, cash and insurance, also possesses this quality. However, in this case the insurance apparently was insufficient to cover the full expense. This may have made the patient feel that he had been exploited. Ranks 6 and 7, employer and welfare respectively, suggest a quality of economic dependence. Rank number 4, no payment, also suggests such a quality, but the discomfort of the individual may have been tempered by the implication that the hospital had excused them from paying the bill. Thus, it is possible to develop an intuitive explanation consistent with these data that does not embrace the position that the attitudes varied because the subjects were treated differently in the hospitals.

Such speculation is interesting. Unfortunately, the resulting explanations are not necessarily reliable. In fact, if the explanation developed above is applied to the rank order of the methods of payment in the public hospitals, it is found that the three type of payment involving the quality of economic independence do not occupy the first three ranks, but are almost equally spaced from the very highest rank to the very lowest rank.

It appears from these data that cash payment is associated with a high rate of positive attitude toward hospital care, but by no means assures positive attitudes. A striking feature of these data is the apparent difference which exists between the public and private hospitals.

Summary

The intent in this chapter was to determine whether there existed any differences in attitudes toward hospital care manifested by various categories of health care consumers studied such as type of hospital (public vs. private), income range, geographic residence, age range, racial identity, level of anomie, and method of payment. Certain apparent differences were found to exist. Subjects in income ranges above \$6,001 tend to have a lower rate of positive responses toward public hospital care than do those subjects with incomes beneath this level. The urban sample showed a lower "good" response rate to the attitude item than did the more rural areas of Hammond and New Roads. This tendency is more pronounced for the attitudes toward public hospitals than for private hospitals. Similarly, subjects being treated in public hospitals tended to be the younger age groups (15 years to 35 years) to have a lower rate of positive responses than did persons in the higher age groups. Again, there appeared to be some difference between the public hospital and private hospital populations as measured by the responses of members of the two major racial groups. The Negro response was slightly more positive than the white response for public hospital care, but the reverse was true in the case of private hospitals. A tendency is seen for public hospital patients having lower levels of anomie to have higher rates of positive attitude responses. Finally, a tendency for rates of positive responses to be related to types of payment is apparent from these data.

For the most part the relationships are obvious enough to be

seen by inspection. However, there is the suggestion of an underlying relationship which is not completely obvious. We have seen that there is no essential difference in the rates of positive attitude responses between the public hospital users and the private hospital users as overall populations. That is, overall, it appears that the public hospital patients and the private hospital patients have an equally positive attitude toward the care they receive. Yet, when attention is directed toward various characteristics of these populations it appears that different attitude patterns may be emerging. This possibility merits some explanation. This is accomplished by testing a series of hypotheses.

H_{01} : There is not a tendency for the rank order of the positive attitude responses of the public hospital patient population to vary in the same direction as the private hospital patient population when ordered on income ranges.

TABLE LIX

RANKS OF POSITIVE RESPONSE RATES TOWARD PUBLIC AND
PRIVATE HOSPITAL CARE OF A PREDOMINANTLY INDIGENT
POPULATION OF SOUTH BATON ROUGE, HAMMOND, AND
NEW ROADS SHOWN BY LEVEL OF INCOME, 1971

	Level of Income*								
	Up to \$1,000	\$1,001 -2,000	\$2,001 -3,000	\$3,001 -4,000	\$4,001 -5,000	\$5,001 -6,000	\$6,001 -7,000	\$7,001 -8,000	Over 8,000
Public Hospitals	5	2	4	1	3	6	8.5	8.5	7
Private Hospitals	6.5	5	3	8	4	1	9	2	6.5

* $r = -.083 > .05$

Level of Measurement: Ordinal

Test Statistic: Kendall Rank Correlation Coefficient with a rejection level of .05 or less.

Decision: A value of $-.083$ was obtained. This is not significant at the $.05$ level of confidence. Therefore, the null hypothesis cannot be rejected and it is concluded that there is no tendency for the rank order of the positive responses of the public and private hospital patients to vary directly when ordered on income range.

Ho₂: There is no difference in the frequency of positive attitude responses between the urban, public hospital patients and the urban private hospital patients.

TABLE LX

FREQUENCY OF POSITIVE AND NEGATIVE ATTITUDE RESPONSES FOR PUBLIC AND PRIVATE HOSPITAL CARE IN A PREDOMINANTLY INDIGENT POPULATION FOR SOUTH BATON ROUGE AND HAMMOND, 1971

Type of Response	Type of Hospital*		Total
	Public	Private	
Positive	352	280	632
Negative	79	55	134
Total	431	335	766

* $\chi^2 > .05$

Level of Measurement: Nominal

Test Statistic: Chi Square with a rejection level of $.05$ or less.

Decision: A Chi Square value of $.487$ was obtained.

This is not significant. The null hypothesis cannot be rejected and it is concluded that there is not a significant difference in the positive response rate of these two groups.

Ho₃: There is no difference in the positive attitude responses between the rural, public hospital patients and the rural, private hospital patients.

TABLE LXI

FREQUENCY OF POSITIVE AND NEGATIVE ATTITUDE RESPONSES FOR PUBLIC
AND PRIVATE HOSPITAL CARE IN A PREDOMINENTLY INDIGENT
POPULATION FOR NEW ROADS, 1971

Type of Response	Type of Hospital*		Total
	Public	Private	
Positive	72	96	168
Negative	6	7	13
Total	78	103	181

* $\chi^2 > .05$

Level of Measurement: Nominal

Test Statistic: Chi Square with a rejection level of .05 or less.

Decision: A Chi Square value of .058 was obtained which is much higher than the established rejection level. Therefore, the null hypothesis is not rejected and it is concluded that there is not a significant difference in the frequency of positive responses toward their hospital care of these two groups.

Ho₄: There is not a significant tendency for the frequency of positive responses toward hospital care of the private hospital and public hospital patients to vary in the same direction when ordered on age.

TABLE LXII

RANKS OF POSITIVE RESPONSE RATES TOWARD PUBLIC AND PRIVATE
HOSPITAL CARE OF A PREDOMINENTLY INDIGENT POPULATION
OF SOUTH BATON ROUGE, HAMMOND, AND NEW ROADS
SHOWN BY AGE CATEGORIES, 1971

	Age in Years: Top of Range is Exclusive*					
	15-25	25 - 35	35 - 45	45 - 55	55 - 65	Over 65
Public	5	6	1	4	3	2
Private	4	3	6	5	2	1

*r = .056 > .05

Level of Measurement: Ordinal

Test Statistic: Kendall Rank Correlation Coefficient with a rejection level of .05 or less.

Decision: A value of $-.056$ was obtained which is not significant at the .05 level. Therefore, the null hypothesis cannot be rejected and it is concluded that when ranked on age there is not a significant tendency for the frequency of positive responses of these two groups to vary in the same direction.

Ho₅: There is no difference in the frequency of positive attitude responses between the Negro, public hospital patients and the Negro, private hospital patients toward the care they receive.

TABLE LXIII

FREQUENCY OF POSITIVE AND NEGATIVE ATTITUDE RESPONSES OF NON WHITES FOR PUBLIC AND PRIVATE HOSPITAL CARE IN A PREDOMINANTLY INDIGENT POPULATION FOR SOUTH BATON ROUGE, HAMMOND AND NEW ROADS, 1971

Type of Response	Type of Hospital*		Total
	Public	Private	
Positive	391	237	628
Negative	72	138	210
Total	463	375	838

* $\chi^2 < .001$

Level of Measurement: Nominal

Test Statistic: Chi Square with a rejection level of .05 or less.

Decision: A Chi Square value of 49.83 was obtained, dictating the rejection of the null hypothesis and the conclusion that there is a difference in the frequency of positive attitude responses between the Negro, public hospital patients and Negro, private hospital patients. An inspection of the data reveals that this difference is in the direction of the Negro, public hospital patient being the most likely to have a positive attitude toward hospital care.

The Contingency Coefficient for this relationship is .236.

Ho₆: There is no difference in the frequency of positive attitude responses between the white, public hospital patients and white, private hospital patients toward hospital care.

TABLE LXIV

FREQUENCY OF POSITIVE AND NEGATIVE ATTITUDE RESPONSES OF WHITES FOR PUBLIC AND PRIVATE HOSPITAL CARE IN A PREDOMINENTLY INDIGENT POPULATION FOR SOUTH BATON ROUGE, HAMMOND AND NEW ROADS, 1971

Type of Response	Type of Hospital*		Total
	Public	Private	
Positive	58	138	196
Negative	13	23	36
Total	71	161	232

* $\chi^2 > .05$

Level of Measurement: Nominal

Test Statistic: Chi Square with a rejection level of .05 or less.

Decision: A Chi Square value of .621 was obtained which is not significant dictating that the null hypothesis be accepted and the conclusion drawn that there does not exist a significant difference between the frequency of positive attitude responses of the white, public hospital patients and the white, private hospital patients. Inspection of the data reveals that the difference which does exist is in the direction of the white, private hospital patient being the most likely to express a positive attitude.

Ho₇: The relationship between anomie and rate of positive attitude response among those persons utilizing public hospitals is not the same as among those utilizing private hospitals.

TABLE LXV

RATE OF POSITIVE ATTITUDE RESPONSE FOR PUBLIC HOSPITAL AND PRIVATE HOSPITAL CARE SHOWN BY LEVEL OF ANOMIE IN A PREDOMINENTLY INDIGENT POPULATION OF SOUTH BATON ROUGE, HAMMOND AND NEW ROADS, 1971

Level of Anomie	Positive Response Rates*	
	Public Hospitals	Private Hospitals
0	.900	.847
1	1.000	.800
2	.825	.923
3	.745	.848
4	.910	.867
5	.772	.841
6	.768	.833

Z=.8405 > .05

Level of Measurement: Interval

Test Statistic: Product moment correlation coefficient to determine the strength of the relationship in each sample and the Z test to determine the significance of the difference between these two relationships. A rejection level of .05 or less is used to reject the null hypothesis.

Decision: The correlation coefficients of $-.627$ and $-.033$ were computed for the public hospital and private hospital samples respectively. The Z value obtained for the difference between these two correlations is $.8405$. This value is not significant at the .05 level. Thus, the null hypothesis cannot be rejected and it must be assumed that the relationship between anomie and rate of positive attitude response of those persons utilizing public hospitals is not significantly different from those utilizing private hospitals.

H₀: The rate of positive attitude response toward hospital care does not bear the same rank order relationship to methods of payment in both public hospital and private hospital populations.

TABLE LXVI

RANKS OF POSITIVE ATTITUDE RESPONSE TO HOSPITAL CARE SHOWN BY TYPE OF PAYMENT FOR PUBLIC AND PRIVATE HOSPITALS IN A PREDOMINANTLY INDIGENT POPULATION OF SOUTH BATON ROUGE, HAMMOND AND NEW ROADS, 1971

Type of Hospital	Ranks by Type of Payment*					
	Medicare	Insurance	Cash	None	Employer	Welfare
Private	1	2	3	4	5	6
Public	3	6	1	2	5	4

$$r = .067 > .05$$

Level of Measurement: Ordinal

Test Statistic: Kendall rank correlation coefficient with a rejection level of .05.

Decision: A Kendall rank correlation coefficient of $.067$ was obtained. This is not significant at the .05 level. Therefore,

the null hypothesis cannot be rejected and it is concluded that the rate of positive attitude response toward hospital care does not bear the same rank order relationship to methods of payment in both public hospital and private hospital populations.

It appears that there are both differences and similarities in the attitude behavior of public hospital and private hospital populations. When the proportion or rate of positive responses to hospital care are considered there is not a tendency for these rates to vary in the same direction with respect to age. In public hospital consumer populations there is a tendency for the younger age groups to have a lower rate of positive responses and for the upper age groups to be more divided. In the private hospital consumer population, there is a tendency for the older age groups to have a stronger positive response rate and for the positive response rate of the two younger age groups to rest at about the mean.

Type of residence, whether rural or urban, is also associated with a difference in attitude response patterns. The rural population tends to have a stronger positive response rate than does the urban population. However, there is no significant difference between the two groups in relation to the distribution of positive responses between public and private hospitals.

There is also a relationship between race and expressed attitude toward hospital care. This pattern shows the Negro tending to present a higher rate of positive responses in the public hospital group than in the private hospital group and the white population evidencing the opposite relationship, although the relationship for the white

population is not significant. When positive attitude response rates are ranked by type of payment different patterns also emerge for the public and private hospitals. When income is considered it is found that there is a tendency for the public hospital consumer and the private hospital consumer to again present different patterns of attitude responses with the higher income groups of the public hospital patients tending to have the lowest positive response rates.

Of those characteristics explored, only anomie and rural-urban residence present a relationship to attitudes toward hospital care which cannot be said to be significantly different between the public hospital consumer and the private hospital consumer.

CHAPTER VII

SUMMARY AND CONCLUSION

Background

This investigation began as an exploratory study designed to determine the health care patterns of the medically indigent persons in three selected communities. However, as planning for the study progressed, it was discovered that a knowledge of health care behavior of the medically indigent does not provide maximum insights for health care planning. A knowledge of the health care patterns of all persons living in indigent areas is of more value. Consequently, this became the objective of the study.

To accomplish this exploration, three population centers were selected representing a range of population types. One was a trade center depending on a farm economy and having little industry which is not farm related. A second community was somewhat larger. It was formally a farming area and produce shipping center, but is now beginning to industrialize. The third population center was located in an industrial, urban area. These population centers offered varying degrees of industrialization and urbanization, two ubiquitous influences in our society.

The sampling procedure used was adapted to each community. In the urban center, census data were used to locate low income census

districts. A sampling procedure described by Kish was employed to generate the sample.¹ In the transition community a great deal of difficulty was encountered in gathering the sample. Census tracts proved to be too large in proportion to the size of the community to be sensitive to concentrations of poverty populations. That is to say, each census tract covers such a large portion of the community that no single tract is limited to a predominantly low income population. Efforts to locate a previous poverty study proved to be unproductive. As a result of these complications it was necessary to improvise. This was done by revisiting the low income occupied homes in the other two communities and observing their characteristics then arriving at an approximation of the "usual low income home." With this "type" in mind a team drove through the community and marked the location of such homes on a map from which the sample was drawn. Although this method did not result in a completely precise location of the low income homes, it did prove to be more efficient in this respect than did the method of utilizing a poverty survey which had previously been completed by the Office of Economic Opportunity Agency in the smallest community.

Having accomplished the sampling, attention was directed to gathering data. A schedule was developed for this purpose. The development of this instrument was a somewhat awkward process and was accomplished in several stages. Inputs were obtained from a medical survey instrument developed by Mulford at the University of Iowa, from a

¹Leslie Kish, "Two Stage Sample of a City," American Sociological Review, XVII (December, 1952), 761-69.

committee of professional persons, including medical doctors and social workers, and from a lay group representing the low income population. A great deal of the content of the schedule was dictated by its health planning purpose. The pretesting was accomplished in two stages. The first, devoted to the health and demographic items, was accomplished with an N of 200. The second stage was devoted to items pertaining to health care utilization. The N for this stage was approximately half as large as that used in the first stage.

The profound sociological importance of health care should not be underestimated. In the early history of man, illness must have been a threat to the very existence of the species. Even as late as 1348 one nation, England, lost one-third of its population from the Black Death in a single year. Society could not ignore such a serious threat. Consequently a large body of norms developed to regulate the condition as well as possible. Obviously, medical care is such a body of norms. In addition, society developed norms related to symptom perception, the behavior of the sick person and the behavior of the non-sick toward the sick.

In exploring phenomena with such a wide range of influence, it is necessary to have a conceptual model that can accommodate to relationships at several different levels. To accomplish this a systems model was decided upon. The literature suggests that systems exist at

several levels.^{2,3,4} Each of these levels are thought to interpenetrate. Thus, influences must be transmitted from one system level to another if such an interpenetration does exist.

It was felt to be necessary to establish whether such a condition does obtain before constructing the system model. If it does, then no social system model can be adequate if it does not provide for the simultaneous consideration of influences from the organismic, personality, social, and cultural system levels.

In approaching the problem of establishing the possibility of the existence of system level interpenetration, it was assumed that if a condition existing on one system level could be demonstrated to be significantly related to analogous conditions on each of the several other system levels this would be compatible with the possibility. It was also assumed that disease is a disruption of the homeostasis on the organismic system level. Analogous conditions at each of the other system levels must be related to the disruption of equilibrium or homeostases at each of the respective levels. At the personality system level this was assumed to be manifested in feelings of not belonging or in feelings of alienation. A breakdown of equilibrium at the social

²Robin M. Williams, "The Sociological Theory of Talcott Parsons," in Max Black (ed.), The Social Theories of Talcott Parsons: A Critical Examination, Englewood Cliffs: Prentice-Hall, Inc., 1961, pp. 69-72.

³Marvin E. Olsen, The Process of Social Organization, New York: Holt, Rinehart and Winston, 1968, p. 236.

⁴James G. Miller, "Toward a General Theory for the Behavioral Sciences," American Psychologist, X (September, 1955), 521.

system level was assumed to be conditions suggesting a breakdown in social structure. More difficulty was experienced in deciding on the manifestation of disequilibrium at the cultural system level. It was finally decided that a fundamental characteristic of American culture is the emphasis on purchasing goods and services. Although it may be argued that this emphasis is diminishing at the present time, it still remains true that this concept is communicated through the abundant advertising to which the American public is constantly exposed. One disequilibrium condition which can be anticipated to exist at the cultural system level, then, is the fact that some segments of society that are exposed to the theme that it is American, desirable, good, or expected for people to purchase goods and services may not be financially able to conform to this expectation. Thus, the shopper who must use food stamps, the health care consumer who must seek free medical care, or the family provider who can not afford to purchase may be considered to be existing in anomie to some extent because they cannot practice the norms which are communicated to them as being most desirable.

In operationalizing these various levels of system disequilibrium readily available variables were selected. At the organismic system level the rates of perceived pathology were used. The Srole Anomie Scale was used at the personality system level. Observed or reported incompleteness in social structure was used to represent disequilibrium at the social system level. At the cultural system level, it proved difficult to locate a system variable. Consequently, an

effort was made to locate an appropriate parameter. Income was the parameter decided upon, as it was reasoned that the American culture emphasizes the purchase of goods and services and an inability to conform to this expectation may be conducive to anomie.

The resulting calculations from this scheme indicate a strong relationship between disruption of homeostasis on the organismic system level and analogous conditions at each of the several higher system levels. Although it is not claimed that this proves the existence of system interpenetration, since this was not the intent, it does suggest that the possibility of such a condition existing is demonstrated to the extent that any model developed to explore health care behavior must accommodate to such a possibility.

A second condition that was felt to be essential for the system model is that of a cybernetic structure since any system which endures over time in the face multiple influences must be a self adjusting system. These qualities were incorporated into a modification of a system model developed by Holder.⁵ After constructing the model it was tested by applying it to two decision making behaviors. These were the decision of pathology bearing persons to seek treatment from a medical doctor and the decision of pathology bearing persons not to seek treatment from a medical doctor. A factor analysis of these responses produced factors which were consistent with the system model in both number and content.

⁵Harold D. Holder, "Evaluation Methods and Dynamics in Program Planning," (Source unknown-reprint on file at the L.S.U. School of Social Welfare), p. 36.

Having established the conceptual framework, attention must now be directed to the specific findings of the study. Although no effort was made to test out further the viability of the system model in the study, it does provide a framework for reviewing the findings. Three areas of dependent variables were explored. These were pathology, health care utilization, and attitudes toward hospital facilities. Of these, pathology represents the organismic system, utilization the social system level and attitude a reaction to the behavior of the environment. Several independent variables were explored in various combinations. These were anomie, race and ethnicity, age, family composition, geographic location, religion, and income.

Pathology

The survey approach used in this study offers many advantages. Unfortunately, it also provides some disadvantages. One potentially serious disadvantage is the possibility that in using this approach to estimate morbidity rates those groups who are more sensitive to symptoms may tend to over report morbidity. These groups were determined to be: Hammond residents, members of medically constricted religious groups, people in the over \$8,000.00 per year income category, and members of the "American" ethnic group.

The morbidity data were tabulated according to several of these classifications including: place of residence, income, and ethnicity. These tabulations indicate that the perceived morbidity rate in Hammond is higher than either of the other communities. If the tendency to be symptom sensitive inflates the perceived morbidity rates than we would

expect Hammond, which has the highest symptom response, to also have the highest perceived morbidity response. When the other two population classifications are examined, however, it is found that in neither of them do perceived morbidity rates and symptom response rates vary in the same direction. Although we cannot say from this comparison that the tendency to think of symptoms as important enough to require treatment does not inflate perceived morbidity rates, it is possible to say that it does not inflate these rates to the extreme of nullifying other influences, presumably including the presence of morbidity.

Assuming, then, that the data obtained through this survey provided a relatively accurate estimate of morbidity the following relationships were found to obtain. The overall morbidity rate of the sample population was positively related to anomie, incomplete family structure, atypical family status of children, female head of household status, and non-regular church attendance. In addition, it was negatively related to family income.

Taken individually, these findings are not exceptionally exciting. In fact, with the possible exception of two of these relationships, the findings closely approximate the expected. These unexpected findings are the high morbidity rates for the female head of household and for the "atypical" child. In the former instance, it would be expected that any difference in rates would be biased toward the non-head of household since, in addition to being influenced by probability, the head of household status could not be held by persons experiencing serious pathology. The latter situation, that involving

the "atypical" child, is unexpected simply because it apparently has not been explored previously.

Collectively, the implications of these findings are somewhat more significant, for they are not inconsistent with the concept of interpenetration of system levels. If, as has been suggested, living systems exist at several different system levels which interpenetrate each other then any condition existing at one system level must exert an influence at each of the other system levels.

It is doubtful that this influence is in the nature of a defused impact. A greater likelihood is that the influence is channeled from one system level to another through some common structure. From this point of entrance the influence may then spread out through the system. This common structure between systems suggests any condition at one system level must be related to an analogous structure at each of the other system levels.

If disease is assumed to be the disruption of the homeostasis of the organismic system level, then it must be related to some systematic disruption of equilibrium at each of the higher system levels. In this study, it was demonstrated that the following analogous conditions could be assumed to exist at the several system levels.

Organismic System Level

1. Disease

Personality System Level

1. Feelings of Alienation

Social System Level

1. Incomplete family structure
2. Position of atypical child
3. Position of female head of household
4. Irregular church attendance

Cultural-Economic System Level

1. Income

These relationships should be received with certain reservations. First, they cannot be considered to exhaust the possible inter-system relationships which might exist. Secondly, no cause and effect relationship can be assumed to obtain between these conditions on the basis of the data which are available from this study.

Health Care Utilization

As pathology intrudes upon a population, its members become health care consumers. The Health care consumer is made aware of health care utilization norms through a variety of sources including: the church, the mass advertising media, the cultural media, agencies such as the Departments of Public Welfare and Public Health, and by word of mouth from the experienced consumer to the inexperienced consumer. Each of these sources tend to reach different sectors of the population. On occasion, this is by design, but at other times, it is because of the selectivity with which the population exposes itself to these various sources.

As a consequence of this differential exposure to health care utilization information, there exists a wide range of knowledge and understanding of health care utilization. This condition along with

other influencing factors produces different patterns of health care utilization. An examination of these different patterns of utilization revealed that the medical doctor is, by far, the most frequently resorted to health care resource by all groups within this sample, including those persons belonging to the medically constricted religious groups. Entrance into the health care system is usually initiated, then, through the medical doctor.

Since this is the case, the decision making process involved in deciding whether or not to visit a medical doctor is important. An exploration of this process through factor analysis suggests that it is far more complex than symptom determinism. In fact the process seemingly conforms to a rather complex system model with organismic, personality, cultural and social components. The symptomatic person is aware of the discomfort of the symptom. He interprets this discomfort within a cultural context and either reconciles himself to it or begins to rationalize the decision to go to a medical doctor. There also occurs a determination of the effects upon the family of either going or not going to the doctor. Finally, feedback is sought from the environment and the potential health care consumer is either encouraged or develops a distrust of the health care system. The process may not occur in this temporal sequence, however.

Many influences impinge upon this process. Persons living in a rural area tended to conform to the most conventional utilization. Members of the medically constricted religions tended to visit the medical doctor less frequently, but this tendency was rewarded by their

having illness of a more serious nature.

Although place of residence is associated with differences in quality of physician utilization, it cannot be assumed from these data that the differences are related to the extent of urbanization or industrialization. Hammond, the community in transition, presented the lowest rate of families having a family physician as well as the highest rate of persons utilizing out of town doctors.

Income, also, is associated with the decision to utilize a medical doctor. Despite the fact that the low income groups expressed a stronger preference for the medical doctor as a first or second treatment choice, they actually tended to utilize the medical doctor at a lower rate than did the upper socio-economic groups. They also tended to utilize a wider range of community caretakers.

The subjects having the highest level of anomie tended to select the medical doctor as a first or second choice at a lower rate than did subjects with lower levels of anomie. However, the middle ranges of anomie appeared to be associated with higher rates of medical doctor selection as first or second choice than were either the highest or lowest levels of anomie.

Although the medical doctor was the most frequently selected health caretaker as the initial contact in entering the health care system, he was by no means the only caretaker thus utilized. The spouse and other relatives were frequently the first source of help sought. Both of these sources were turned to at the greatest rate by subjects with lower rates of anomie. This is partly explained by the fact that

subjects with high rates of anomie were less likely to have a spouse or close relatives.

Attitudes

The sensitivity of American institutions to the people they serve, while certainly not perfect, is remarkable enough that Carl Marx, in a speech at the Hague, observed that the United States was one of two mentioned nations which may not need to experience the proletariat revolution because of the nature of its institutions.⁶ Perhaps one of the most feasible explanations for this sensitivity is the fact that there are two nearly ubiquitous feedback mechanisms built into institution behavior in the United States. These are the competitive model and the right to vote.

The competitive model serves as a feedback mechanism because with the existence of multiple, comparable outputs and a client system which can exercise freedom of choice there is a tendency for the members of the client system to gravitate toward the provider system which they feel to be most desirable. The loss of consumers by the competing provider systems is interpreted as negative feedback and adjustments are made to reduce this negative feedback by more closely accommodating to the interests of the consumers.

The feedback quality of voting on tax supported agencies and services is obvious. However, in the case of the provision of health

⁶Hans Kelsen, The Political Theory of Bolshevism (Berkeley: University of California Press, 1948), p. 41.

care services both of these feedback mechanisms have been greatly dampened. The right to vote has not been effective because health care delivery has been effectively held out of the political sector until recently. Competition has also been muted in health care delivery. This results partially from the monopolistic like dominance of the medical profession in the field. A reinforcing condition is the vast numerical superiority of consumers to providers.

Such a condition is potentially explosive, for without an open feedback channel the only avenue available to consumers to express their attitudes may be consumer revolt. Thus, an awareness of consumer attitudes toward health care facilities can be of benefit to both the provider system as well as the consumer system.

For the purpose of this study the subjects' attitudes toward the medical facility to which they most recently went for care were elicited. Of these the medical hospital was selected for comparison because it offered a clear dichotomy between the public and private types. The responses were recorded as: poor, fair, or good. These responses were then tabulated by income range, geographic location, age range, racial and ethnic identity, level of anomie, and method of payment.

Essentially, little difference was found in the rate of "good" responses for public and private hospital patients. In fact, it appeared that there may have been some partitioning of hospital patients with consumers tending to gravitate to that type of hospital for which they had a preference. That income alone was not the

determining factor, is seen by the fact that 38.7% of the subjects with an income of less than \$5,001.00 per year utilized a private hospital. There is a difference in attitude behavior by income groups with the higher income groups tending to produce a lower "good" response rate for public hospital care. In keeping with this partitioning possibility is the fact that of the several independent variables listed above only the behavior of anomie and attitude and place of residence and attitude were not significantly different for both public and private hospitals.

The fact that over 80% of the population expressed a "good" response to hospital care should not be interpreted as an overwhelming vote of confidence for the present health care system. Although this preponderance of "good" responses suggests that there may not be a danger of imminent consumer revolt in the health care field, there are some ominous indications. First, the nearly 20% of the population who expressed less than a "good" response is sizeable and cannot really be written off until the behavior of this segment over time is determined. Before a decision is made about this ratio, it is necessary to know whether the segment responding with less than a "good" attitude is increasing, decreasing, or remaining static over time. There is some indication in the available data that this population segment might be expected to increase. One reason for this prediction is the fact that the urban population tends to have a lower rate of "good" responses than does the more rural population. Since there is a trend toward urbanization in the area it must be assumed possible that, as

urbanization increases, attitudes toward hospital care may become less positive. Another potential influence which must be considered with the public hospital is that the younger age groups in this sample tended to have less positive attitudes toward public hospital care. It is, of course, possible that this is a characteristic of the age group. Another possibility, however, is that these subjects, having experienced a different socialization, may have a different attitude set which may endure as they progress into the higher age groups. If this occurs, it should depress the attitudes in the higher age groups.

Limitations of the Study

One limitation of this study is somewhat characteristic of exploratory studies. This is the tendency to explore horizontally rather than vertically resulting in some lack of depth. Usually this results from a calculated trade off in an effort to achieve maximum utilization of the available data. In some instances, the opposite condition results and some data are not explored to the extent which their importance warrants.

This occurs in two specific instances in this study. One of these is in the exploration of pathology where attention is directed primarily to the overall pathology rates. A productive area of exploration would be the relationship of each category of pathology to the various independent, socio-economic variables. A second area of potentially productive exploration that was given only cursory attention is the area of attitude, especially as it relates to types of pathology and patterns of utilization. Unfortunately, the purposes and

resources of this study did not permit an exhaustive exploration of these areas at this time.

A second limitation embodied in this study is the nature of the sampling methods used. In each geographic area the sample was generated differently. Although in each instance an effort was made to preserve the quality of randomness, it cannot be assumed that this quality was perfectly preserved in any of the samples nor can it be assumed that this quality was preserved to the same extent in each of the samples. This defect results largely from two constraints imposed by the grant under which the study was undertaken. One of these constraints was that the sample should be drawn from the predominantly poverty areas of the communities. The second constraint was that the sampling should be accomplished in a manner that would demonstrate a feasible way to proceed in the future studies of the various types of population centers existing in the Louisiana Capital Area Health Planning Council's jurisdiction.

As a result of these sampling nuances the samples generated in Hammond and New Roads are representative only of the poverty sectors of the communities while the South Baton Rouge Neighborhood Area sample is representative of that entire neighborhood, which is a preponderantly indigent neighborhood.

A difficulty was encountered in the sampling. Originally, it was intended that the sampling unit would be the family, but that the data would be recorded and tabulated on the individual when ever appropriate. It was expected that, on occasion, a parent would answer as

proxy for minor children on many items. These arrangements were maintained throughout the study. However, as a result of a policy of having as many members of the family together as possible during the interviewing it was learned that frequently the late adolescent children disagreed on some items such as who they considered their doctor to be and what their attitudes were toward the care which they received. Under these circumstances units of decisional jurisdiction over their own or others' health care decisions were considered to be the data source. This condition, along with a tendency not to respond to some items, such as income, and the fact that some items were not appropriate to all family members, resulted in an apparently bounding N. This condition is not uncommon in surveys and there is no reason to believe that any errors resulting from this condition are systematic.

It was claimed earlier that a compelling need for this study was produced by the absence of morbidity data at any level other than the national level. Although this claim is approximately accurate at this time there are some indications that this condition may not endure indefinitely. There is one source of data which may relieve this condition in the future. This is the National Health Survey. This survey was designed to represent the civilian, noninstitutional population of the United States. Estimates relate to the nation as a whole. The sample size and structure permit the extension of some of these statistics to four broad geographical regions and for selected large metropolitan areas, but the design was not intended to yield state estimates.

However, an experimental technique for utilizing these data to

produce crude state estimates has emerged. This technique, by relating the statistics to the variables of color, sex, age, residence, family income, family size and industry of head of household, reduces the sample variability and bias.⁷ In view of this development there is a possibility that increased sophistication in data manipulation may permit the estimation of morbidity at a geopolitical level other than the state at some time in the future.

Despite these several limitations this study does provide important insights into the health care needs, utilization patterns, and consumer attitudes. The attempt to relate the study to systems theory enhances its potential contribution.

Recommendations

A characteristic of exploratory studies is that they frequently raise more questions than they answer. This study is no exception. It provided some insights into the relationships between pathology, health care patterns, and attitudes toward hospital care to several socio-economic variables. It also tended to support the sociological significance of the health field.

However, the most exciting outcomes of this study are the identification of two potentially productive areas for further explorations. One of these is the relationship between pathology and analogous

⁷U. S. Department of Health, Education and Welfare, Public Health Service, Synthetic State Estimates of Disability: Derived from the National Health Survey, PHS Publication No. 1759, Washington, D.C.: U.S. Government Printing Office, 1968, pp. 1 and 9.

structure at each of the several system levels. This relationship apparently obtains for overall pathology rates, but another possibility that exists is that the several pathologies may each bear a different relationship to the other system levels. A detailed examination of these relationships offers to provide an expansion of the understanding of multiple causation as well as the sociological implications of illness.

A second area meriting further exploration is that of the decision making process involved in seeking health care. The data gathered in this study suggest that this process is less a function of the organismic system level than it is a function of the several other system levels. Thus, the symptom itself is less important in making the decision to seek treatment from a medical doctor than is the meaning of the symptom to the individual and the meaning of the decision to the family system. However, these data were obtained from verbal responses. Consequently, they may not accurately reflect the dynamics at each level. A better understanding of these decision making dynamics could lead to more effective mobilization of the morbid populations.

Several, more specific, recommendations can be made on the basis of this study. In view of the demonstrated relationship between morbidity, family dissolution, and anomie, it should be predicted that perceived morbidity can be expected to increase in the future at a rate greater than the rate of general population increase, since both family dissolution and anomie are thought to be increasing in our society. The relation between family dissolution also offers a possible focus for prevention, especially in locating high risk populations. Of special

interest in this area is the high morbidity rate experienced by the "atypical" child. A team approach that offers the capability of improving the integration of this child into the supportive structure of the family might effectively reduce this high morbidity rate.

The usual mode of entrance of a person into the health care delivery structure is through the medical doctor. This proves to be uneconomical both in terms of cost to the consumer and in the deployment of health care manpower. The spouse is frequently the first person turned to by persons experiencing pathology while, less frequently, the minister, druggist, chiropractor, and faith healer are resorted to. There is, then the possibility of mobilizing these caretakers to provide a more effective gate keeping function. One other quality which should not be overlooked is the fact that in this sample, the nursing profession plays no role at all in the entrance of the consumer into the health care structure.

There are some indications that the low income consumer, as represented by this sample, is becoming restive and that this restiveness can be expected to increase in the future. Because of the public utility nature of health care it should be more responsive to the interest of its consumer. If an effort is made to reduce this restiveness, it should not be assumed that the public hospital should be modified to more closely resemble the private hospital. This is true because, first both populations are approximately equally positive in their attitudes. Secondly, the two populations are unique and may be expected to respond differently to different types of health care

delivery. Apparently a structural defect which persists in the health care system is the absence of a viable feedback mechanism. Some attention, then, should be directed toward designing and developing such a structure. It is the writer's belief that the study provides an excellent base for further exploration and suggests several innovative methodological procedures to utilize in any such studies.

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A P P E N D I C E S

APPENDIX A

1971

LOUISIANA CAPITAL AREA HEALTH PLANNING COUNCIL
 PERCEIVED HEALTH NEEDS, ATTITUDES TOWARD HEALTH CARE, AND
 HEALTH CARE CONSUMPTION PATTERNS OF THE MEDICALLY INDIGENT

(1) Name _____	(2) Functional Dwelling Type 1. Single family dwelling unit 2. Duplex 3. Rooming house 4. Apartment house 5. Hotel	Questionnaire _____ of _____ Questionnaires
Address _____ 1. Baton Rouge 2. Hammond 3. New Roads		

PERSONAL DATA ON OCCUPANTS

(3-6) IDENTITY				(7) FAMILY INCOME	
Parents	Gr'parents	Siblings		1. under \$1,000	6. 5,001-6,000
1. Mother	1. One	0,1,2,3,		2. 1,001-2,000	7. 6,001-7,000
Only	Maternal	4,5,6,7,		3. 2,001-3,000	8. 7,001-8,000
2. Father	2. One	8,9,10,		4. 3,001-4,000	9. above 8,000
Only	Paternal	11, 12		5. 4,001-5,000	
3. Mother & 3. Two					
Father	4. None				
4. None					
(8) ETHNIC ORIGIN			(9) RELIGION		
1. Anglo'Saxon	4. Negro		1. Catholic	5. Conservative	
2. French	5. German		2. Jewish	Protestant	
3. Italian	6. Other		3. Liberal	6. Medically	
	(Specify)		Protestant	Constrictive	
			4. Moderate	7. None	
			Protestant		
(10-11) CHURCH PARTICIPATION					
Attendance			Contribution		
1. Active			3. Regular		
2. Inactive			4. Irregular		

EASY INSPECTION CODE

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54

1. (a) What is the name of the head of this household?
ENTER IN 1st COLUMN
 - (b) What are the names of all other persons 21 and over who live here? ENTER
 - (c) I have listed (READ NAMES). Is there anyone else now staying here such as friends, relatives, or roomers? 1 - Yes 2 - No
 - (d) Do any of these people have a home elsewhere?
1 - Yes APPLY HOUSEHOLD MEMBERSHIP RULES. IF NOT MEMBER, DELETE (12)
2 - No LEAVE ON LIST.
 - (e) What are the names of your children?
IF ANY ADULT MALES LISTED, ASK:
 - (f) Are any of the persons in this household now on full-time active duty with the Armed Forces or living away from home?
1 - Yes DELETE 2 - No
-

2. How are you related to the head of this household?
(son, daughter, father, mother, mother-in-law, roomer, step-son, spouse, etc.)
WRITE IN RELATIONSHIP (13)
-

3. How old are you?
-

4. What are the ages of the other members of the family?
(14)
-

5. Sex (Write in code in each column)

1 - male
2 - female (15)

6. Are you now married, widowed, divorced, separated, or never married? (ask for each appropriate member of the family) CODE EACH COLUMN

1 - married* 4 - separated
2 - widowed 5 - single
3 - divorced

(16) -----

*IF "MARRIED" (1), ASK:

How long have you been married? (17-18)

DETERMINE WHICH ADULTS ARE AT HOME AND RECORD THIS INFORMATION. BEGINNING WITH #7, YOU ARE TO INTERVIEW FOR HIMSELF OR HERSELF OR HAVE PRESENT EACH ADULT WHO IS AT HOME (EXCEPT WHEN OTHERWISE INDICATED)

CODE EACH COLUMN

1 - At home
2 - Not at home (19)

7. Were you or any member of the family, sick at any time last week or the week before? (That is, the 2-week period which ended this past Sunday night?)

1 - Yes

2 - No

(20)-----

(a) What was the matter?

(b) Anything else?

(21)

8. Last week or the week before, did you or any member of your family, take any medicine or treatment for any condition (besides . . . which you told me about?)

1 - Yes

2 - No

(22)-----

(a) What was the condition?

(b) Do you have anything else that bothers you?

(23)

9. Since this time last year, have you (your--, etc.) had any injuries from accidents that interfered with things you usually do for a half day or more or for which you had treatment?

1 - Yes

2 - No

(24)-----

(a) What was the accident and injury?

(b) Anything else?

(25)

10. Did you ever have an (any other) accident or injury that still bothers you or affects you in any way?

1 - Yes

2 - No

(26)-----

(a) In what way does it bother you?

RECORD PRESENT EFFECTS

(b) Anything else?

(27)

11. Has anyone in the family--you, your--, etc. had any of these conditions during the past 12 months?

1 - Yes

2 - No

(28)

READ CARD "A," CONDITION BY CONDITION:
RECORD IN HIS COLUMN ANY CONDITION (BY
NUMBER) MENTIONED FOR THAT PERSON,

(29)

12. Does anyone in the family have any of these conditions?

READ CARD "B," CONDITION BY CONDITION: RECORD
IN HIS COLUMN ANY CONDITIONS (BY NUMBER)
MENTIONED FOR THE PERSON.

(30)-----

1 - Yes

2 - No

(31)

13. Do you or your family have anyone that you go to get help when you feel bad (elicit responses other than medical doctors)?

1 - Yes

2 - No

(32)-----

What type of person?--List

(33)

14. Which of these symptoms do you think are serious enough to cause a person to go to a doctor?

USE CARD C

(34)

15. Did you or anyone in your family have any of these symptoms over the past year and not go to the doctor? (if yes, go to item 16)

1 - Yes

2 - No

(35)

16. If yes to 15, we would like to know why you did not go to the doctor.

USE CARD D

(36)

17. Did you or anyone in your family go to a doctor during the past year (if yes, go to 18)?

1 - Yes

2 - No

(37)

18. Now we would like to know what helped you to decide to go to the doctor.

USE CARD E

(38)

When you feel sick whom do you go to for advice or help? (first, second, etc.) WRITE IN

19. Do you ever go to a friend or neighbor?

- 1 - Yes
- 2 - No

(39)

20. Do you ever go to a minister or priest?

- 1 - Yes
- 2 - No

(40)

21. Do you ever go to a druggist for advice when you are sick?

- 1 - Yes
- 2 - No

(41)

22. Are you taking medicine at this time?

- 1 - Yes, prescription
- 2 - No
- 3 - Yes, non-prescription

(42)

23. (if yes to 22) About how much did your family pay for this medicine last month (July)?

WRITE IN AMOUNT

(43)

24. How is it paid for?

- 1 - the person or company you work for
- 2 - insurance
- 3 - cash
- 4 - Medicare
- 5 - no payment
- 6 - welfare

(44)

25. Do you have an "usual" or "family" doctor that you do to?

- 1 - Yes
- 2 - No

(45)

26. How long has it been since you or any member of your family last went to a doctor?

WRITE IN

(46)

27. Where is the doctor located?

WRITE IN HOSPITAL OR CLINIC AND TOWN (47)

28. Approximately how much did the visit cost?

WRITE IN AMOUNT IN THE APPROPRIATE COLUMN (48)

29. How was the visit paid for?

- 1 - the person or company you work for
- 2 - insurance
- 3 - cash
- 4 - Medicare
- 5 - no payment
- 6 - welfare

(49)

30. During the past six months about how many days have the members of your family been sick enough to have to put off what they ordinarily do, i.e., work, school, etc.

RECORD IN THE APPROPRIATE COLUMN (50)

31. Have you or any member of your family been treated at a public general hospital? (if yes, list them)

- 1 - Yes
- 2 - No

(51)

32. How long has it been?

- 1 - during the past month
- 2 - one to three months
- 3 - three months to one year
- 4 - one to five years ago
- 5 - over five years ago

(52)

Ask items 33-34 for each hospital listed

33. How was the bill paid?

- 1 - the person or company you work for
- 2 - insurance
- 3 - cash
- 4 - Medicare
- 5 - no payment
- 6 - welfare

(53)

34. How do you feel that you were treated?

- 1 - with courtesy and respect
 - 2 - with indifference
 - 3 - with open irritation or unpleasantness (54)
-

35. Have you or any member of your family been treated at a private hospital?
(if yes, list them)

- 1 - Yes
 - 2 - No (55)
-

36. How long has it been?

- 1 - during the past month
- 2 - one to three months
- 3 - three months to one year
- 4 - one to five years ago
- 5 - over five years ago (56)

Ask items 38-39 for each hospital listed

37. How was the bill paid?

- 1 - the person or company you work for
 - 2 - insurance
 - 3 - cash
 - 4 - Medicare
 - 5 - no payment
 - 6 - welfare (57)
-

38. How do you feel that you were treated?

- 1 - with courtesy and respect
 - 2 - with indifference
 - 3 - with open irritation or unpleasantness (58)
-

39. Have you or any member of your family been to any clinic such as (suggest examples and list clinics revisited)?

- 1 - Yes
 - 2 - No (59)
-

40. How long has it been?

- 1 - during the past month
 - 2 - one to three months
 - 3 - three months to one year
 - 4 - one year to five years ago
 - 5 - over five years ago
- (60)
-

Ask items 41 - 42 for each clinic visited

41. How was the bill paid?

- 1 - the person or company you work for
 - 2 - insurance
 - 3 - cash
 - 4 - Medicare
 - 5 - no payment
 - 6 - welfare
- (61)
-

42. How do you feel that you were treated?

- 1 - with courtesy and respect
 - 2 - with indifference
 - 3 - with open irritation
- (62)
-

43. In general, how good do you feel the medical care is that you get?

- 1 - poor
 - 2 - fair
 - 3 - good
- (63)
-

44. What type of arrangement do you make for transportation when you seek medical care?

- 1 - own car
 - 2 - relative's car
 - 3 - friend's or neighbor's car
 - 4 - taxi
 - 5 - city bus
 - 6 - volunteers
- (64)
-

45. How many times have you moved during the past three years? (Count only those moves that carried the family into an unfamiliar neighborhood)

- 1 - none
 - 2 - one or two
 - 3 - three to five
 - 4 - over five
- (65)

46. (Ask for those moves counted in item 45.)
Were there any cases of sickness in your family
following any of these moves?--- How many?

1 - None
2 - one or two
3 - three to five
4 - over five

(66)

Now we would like to ask you whether you agree
with some statements about life.

47. Nowadays a person has to live pretty much for
today and let tomorrow take care of itself.

1 - Agree
2 - Disagree or don't know

(67)

48. In spite of what some people say the lot of
the average man is getting worse, not better.

1 - Agree
2 - Disagree or don't know

(68)

49. It's hardly fair to bring children into the
world with the way things look for the future.

1 - Agree
2 - Disagree or don't know

(69)

50. These days a person doesn't really know on
whom he can count.

1 - Agree
2 - Disagree or don't know

(70)

51. There's little use writing to public officials
because often they aren't really interested in
the problems of the average man.

1 - Agree
2 - Disagree or don't know

(71)

52. Things have usually gone against me in life.

1 - Agree
2 - Disagree or don't know

(72)

53. Which of your children do you consider to be the most different from the rest of the family?

(write in name)

(73)

54. How long has it been since you or a member of your family went to a dentist?

- 1 - during the past month
- 2 - one to three months
- 3 - three months to one year
- 4 - one to five years ago
- 5 - over 5 years ago
- 6 - none

(74)

Your Age

Your Weight

Your Height

APPENDIX B

MORBIDITY INVENTORY LIST

1. Asthma
2. Tuberculosis
3. Chronic Bronchitis
4. Repeated Attacks of Sinus Trouble
5. Rheumatic Fever
6. Hardening of the Arteries
7. High Blood Pressure
8. Heart Trouble
9. Stroke
10. Hemorrhoids or Piles
11. Hay Fever
12. Tumor, Cyst or Growth
13. Chronic Gall Bladder Trouble
14. Chronic Liver Trouble
15. Stomach Ulcer
16. Any Other Chronic Stomach Trouble
17. Kidney Stones or Chronic Kidney Trouble
18. Mental Illness
19. Arthritis or Rheumatism
20. Diabetes
21. Alcoholism
22. Thyroid Trouble or Goiter
23. Any Allergy
24. Epilepsy
25. Chronic Nervous Trouble
26. Cancer
27. Chronic Skin Trouble
28. Hernia or Rupture
29. Deafness or Serious Trouble Hearing with One or both Ears
30. Serious Trouble Seeing with One or both Eyes Even When
Wearing Glasses
31. Missing Fingers, Hand, Arm, Toes, Foot, or Leg
32. Palsy
33. Paralysis of any Kind
34. Repeated Trouble with Back or Spine
35. Club Foot
36. Permanent Stiffness or any Deformity of the Foot, Leg, Fingers,
Arm or Back

VITA

The author was born in New Orleans, Louisiana on May 14, 1928. He attended public schools in Hammond, graduating from Hammond High School in 1945. His college education was interrupted by two periods of active duty in the United States armed service. However, a Bachelor of Science degree was obtained at Louisiana State University in January, 1956. This was followed by a Master of Social Work degree in August, 1960, which was also obtained from Louisiana State University.

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EXAMINATION AND THESIS REPORT

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Major Field: Sociology

Title of Thesis: Health Care Patterns, Attitudes, and Resource Utilization of a
Predominantly Indigent Population in Three Communities

Approved:

Major Professor and Chairman

Dean of the Graduate School

EXAMINING COMMITTEE:

Date of Examination:

April 28, 1972