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I am submitting herewith a dissertation written by Abdul Fattah Adio Folawiyo entitled "Health Knowledge, Needs, and Attitudes Related to the Utilization of Medical Facilities on Five Sea Islands of Charleston County, South Carolina." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Health Education.

Bill C. Wallace

Bill C. Wallace, Major Professor

We have read this dissertation
and recommend its acceptance:

Warren J. Huffman

Robert W. Kirk

Quincy A. Stallworth

Accepted for the Council:

Helen A. Smith

Vice Chancellor
Graduate Studies and Research

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HEALTH KNOWLEDGE, NEEDS, AND ATTITUDES RELATED TO THE UTILIZATION OF MEDICAL FACILITIES ON FIVE SEA ISLANDS OF CHARLESTON COUNTY, SOUTH CAROLINA

A Dissertation

Presented for the

Doctor of Education

Degree

The University of Tennessee

Abdul Fattah Adio Folawiyo

December 1975

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DEDICATION

This dissertation is dedicated, with pride and respect, to the researcher's parents Alhaj Waheed Folawiyo (father) and Karamot Folawiyo, to the memories of his grandfather Rufai Folawiyo, and with ancestral respect to his great, great grandfather Tijani Folawiyo.

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ABSTRACT

The purpose of this study was to make recommendations for the development of models for new programs and the improvement of existing health services as indicated by health needs, medical services available, the health knowledge, and attitudes toward clinic utilization by the Sea Island people of South Carolina.

The study involved 364 adults on the five sea islands of the State of South Carolina. In March 1975, the survey instrument was completed after being evaluated appropriate by twelve jurors in medical and health related fields.

Using the Sea Island Comprehensive Health Care Primary Health Assistant's daily outreach activity tract, each island was subdivided into five zones. The administration of the instrument was carried out by fourteen members of the study team and the researcher himself.

Upon receipt of the completed questionnaires, the raw data were key punched on computer cards and verified for accuracy at the Medical University of South Carolina Computer Center. Frequency histograms and percentages were calculated for responses on all questions. Appropriate chi-square tests were run with the two-way tables to determine if there was a significant difference at the .05 probability level.

The major findings were: 45.2 percent of the sample were not using any of the facilities. Thirty and three-tenths percent went to Esau Jenkins Memorial Health Center on Yonges Island, 16.3 percent went to John's Island Clinic, 6 percent went to Family Health Center, and 2.2 percent went to a private clinic in Hollywood.

The majority of the sample believed that medicine over the last five years had improved chances for good health and longevity, but were concerned about the high costs for medical treatment and care. Seventy-two percent favored some type of insurance to cover their medical expenses.

Radio and television programs dealing with health or medicine were not reaching the people; 36.5 percent of the sample never heard or saw one program related to health.

As many as 20 percent went to chiropractors, 0.8 percent went to root doctors, and 0.3 percent went to witch doctors. As many as 2.2 percent of the sample believed in spiritual healing. The Blacks had some understanding of preventive measures, better health attitudes, and relatively fewer health problems.

At the time of this study Sea Island Comprehensive Health Care Corporation was the primary provider of patient care. Family Health Center (County Health Department) was providing some care. These agencies should serve as a base for health delivery since they served the majority of the people on the five Sea Islands. This health care delivery system should include a full range of health services including prevention of diseases and accidents, nutrition, environmental health, sanitation, and mental health.

Mass media, specifically newspapers and magazines, should be used as an incidental method to educate the people. The educational level of the sample was low and the people obviously did not read about health to any extent. Encounters by qualified health educators were needed to bring about a change in behavior.

A health education committee should be formed. This committee should advise, plan and implement programs for patients, employees, and community groups. The Health Education Committee should be composed of representatives of the community, administrative, and social services, four members of the nursing service, two physicians, and eight Primary Health Assistants.

It was recommended that the Sea Island Comprehensive Health Care Corporation start health education programs for the people on these islands. Statistical analysis indicated that health information and/or education should be an integral part of a comprehensive health care program. Personal and community health education are fundamental to any public health service.

The project director of Sea Island Comprehensive Health Care Corporation should coordinate and expand the existing fragmented activities and develop a meaningful evaluation for all the clinics.

It was recommended that the Sea Island Comprehensive Health Care Corporation start health education programs for the people on these islands. Statistical analysis indicated that health information and/or education should be an integral part of a comprehensive health care program.

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CHAPTER I

INTRODUCTION

> Health is a state of total effective physiologic and psychologic functioning; it has both a relative and an absolute meaning, varying through time and space in both the individual and in the group; many forces, intrinsic and extrinsic, inherited and contrived, individual and collective, private and public, medical environmental and social; and it is conditioned by culture and economy, and by law and government. (70)

Health education refers to a broad spectrum of activities ranging from the simple provision of public information to elaborate programs for the training of highly specialized health manpower. This process begins with the imparting of factual information to individuals, and includes interpretation and integration of the information designed to bring about attitudinal or behavioral changes.

The process frequently must be directed not only to the patient, but also to other persons influencing the patient's life. Not only scientific facts, but also understanding of human motivation and behavior as well as information concerning the cultural setting and background of the patient, must all be incorporated into successful communication.

I. PURPOSE OF THE STUDY

The purpose of this study was to make recommendations for and the development of models for new programs and the improvement of existing health services as indicated by felt needs, available medical services

health knowledge, and attitudes toward clinic utilization by the Sea Island people of South Carolina.

II. STATEMENT OF THE PROBLEM

This study was designed to answer the following questions:

1. What medical services are available on the five Sea Islands?
2. What are the perceived health needs of the adult population?
3. What relief actions for health problems are employed by the sample population?
4. Where is the relief sought?
5. What are the feelings of the sample population about utilization of the Sea Island Clinics?
6. Is there a difference in the response to some selected questions above according to age, race, sex, and educational level?
7. What improvements and new programs can be recommended for the Sea Island Clinics?

III. NEED FOR THE STUDY

The Rural Mission, Incorporated, first made health care facilities available to the residents of the five Sea Islands in 1970. There was evidence to suggest that these free services have had some impact on the residents. Eighty-five percent of the people were poor, with large families and little education. Folk medicine was still employed to heal the sick; superstition played a major role in the people's acceptance of their illness; and cultural and religious beliefs were of prime importance.

The organizers maintained that a clinic located in the vicinity of the people, with little or no cost, would change the attitudes of the residents towards utilization of medical facilities. There were allegedly ambigious responses on the part of the clinic supporters in response to the question of funding health services.

A study was needed to determine, among other things, if the residents were using the clinic facilities; if the facilities were deficient in medical care for certain classes of patients; the resident's health knowledge and their perceived health needs; and to make recommendations for the development of models for new programs and the improvement of the existing health services.

IV. AREA OF STUDY

The Sea Islands of South Carolina are comprised of the delta of the Cooper, Ashley, Wapoo, and Edisto Rivers. They are formed of rich alluvial deposits brought down by rivers and creeks. In addition, the lush vegetation of the area forms natural soil rich in nitrates.

Rainfall and a long growing season combine to make the Sea Islands an important agricultural area, although erosion and soil depletion were major problems. Potatoes occupied the greatest acreage, but tomatoes, cucumbers, and watermelons were the chief cash crops. Beef, hogs, and poultry production were major sources of farm income.

According to the Office of Economic Opportunity, the population on the Sea Islands was 85 percent black. The underemployment or unemployment rate was high. Most of the activities in the areas were seasonal in

nature. The majority of workers earned less than $2,000 annually as of September 1974. Most of the people were poor, with large families and little education.

V. DELIMITATIONS

This study was delimited to the five Sea Islands of Charleston County, South Carolina (James Island, John's Island, Edisto Island, Yonges Island, and Wadmalaw Island). Charleston City Peninsula was not included.

This study was further delimited to citizens of voting age eighteen and above.

VI. LIMITATIONS OF THE STUDY

The major limitations of this study were:

1. The sample groups in this study represented a random sample rather than a stratified.
2. Individuals in the sample groups had different educational levels.
3. The findings of this study were limited to an analysis of the responses to the instrument utilized.
4. It was not possible to devise a questionnaire that would have the same meaning to everyone.

VII. BASIC ASSUMPTIONS

On the basis of the delimitations and limitations, several major assumptions were made relative to the study. They were:

1. Medical care was deficient for certain types of diseases and illnesses, such as respiratory problems and obesity.
2. Social structures varied greatly among these communities.
3. Utilization of health clinics increased when the inconvenience of using them decreased.
4. Both the clinic users and nonusers would cooperate with the Primary Health Assistants and Social Workers.
5. Housing, food, and environment had major influences on the health conditions of the people.

VIII. DEFINITIONS OF TERMS

Ambulatory Care. Services provided on an outpatient basis, in contrast to services in the home or to persons who are inpatients.

Consumers. Persons using health facilities who have no direct business interest in health facilities, health organizations, or the rendering of health services.

Environmental Health. The identification of present and anticipated environmental conditions and influences affecting the physical, mental and social well-being of the individual or community.

Family Unit. All people related to each other by marriage or adoption.

Fee for Service. The practice of providing reimbursement to the provider of services on the basis of a designated fee for each item of service performed.

Health Services. All services rendered to individuals which enable them to maintain, develop, or restore their physical and mental well-being.

Medicare. Payments made for needed medical, hospital, and related services for those financially incapable of meeting their medical expenses.

Medical Care. All types of personal health services including the range of service from prevention, diagnosis, and treatment to rehabilitation provided by physicians, dentists, nurses, and all health personnel.

Primary Health Care. Ambulatory, preventive, maintenance, acute, and chronic health services which are most often needed by people.

Provider. A person whose major occupation is in the administration of health activities or performance of health services.

Third Party Payment. Payment for a health service made to a service provider by an insurance company, public program, or some source other than the service recipient.

IX. ORGANIZATION OF THE STUDY

This study consists of seven chapters. Chapter I introduces the study by providing background information, purpose of the study, statement of the problem, need for the study, area of study, delimitations, limitations of the study, basic assumptions, definitions of terms, and organization of the study.

Chapter II contains a review of literature pertaining to evaluation of health services, health services utilization, consumers and health services, attitudes of the consumers, and summary of the chapter.

Chapter III describes the methods and procedures to the study. This chapter also explains the statistical procedures used in the study.

Chapter IV contains the analysis and discussion of the data.

Chapter V summarizes the findings and presents recommendations and implications of the study.

Chapter VI discusses briefly the essence of health education, suggests a health education program, and outlines such a program.

Chapter VII summarizes the general implications of the study.

CHAPTER II

SURVEY OF RELATED LITERATURE

This chapter is divided into four sections. The first section discusses the need for an evaluation of health services due to the increasing costs of medical services and government involvement in financing and delivering personal health services. The second section discusses utilization of health services. Section III summarizes the role of the consumer in the delivery of health care services. Section IV reviews the attitudes of the health consumers.

I. EVALUATION OF HEALTH SERVICES

Richard Winerman (68) in a paper presented to a workshop on International Studies of Medical Care defined health services as "all of the activities of a society which are designed to protect or restore health, whether directed to the individual, the community or the environment." Evaluation of health services is an emerging social, medical, and political issue. Increasing costs of medical services, growing government involvement in financing and delivering personal health services, heightened consumer sensitivity to the problems of quality care—all have contributed to its currency.

Sir William Petty, advocated state intervention on the basis of economic analyses to assure better medical services for the people, indicating that the Crown would profit from an investment aimed at lessening the effects of the plague (54).

During the mid-1800's two pioneers in public health, Edwin Chadwick and Lemuel Shattuck, attempted to evaluate specific public program activities to estimate their impact and cost and to assess the implications of their findings for the public policy (8, p. 443).

Using outcome data, Codman (10) began evaluating medical services in the early 1900's. Although some specific issues have changed, the basic concerns remained pertinent to the problems that society faced at the time of this study. Lee and Jones (43) defined quality of health services by eight "articles of faith" which are: scientific basis for medical practice, prevention, consumer-provider cooperation, treatment of the whole individual, close and continuing patient-physician relationship, comprehensive and coordinated medical services, coordination between medical care and social services, and accessibility of care for all people. These remain defendable goals for health care services in the United States.

During the decade and a half prior to this writing, the conceptual issues in evaluating health care programs have been restated many times. The basic requirements for programmatic evaluation include a statement of the objectives of the program, careful attention to the nature of the measurement units, assessment of the reliability of the analysis, consideration of the cost of the method, and a plan for integrating evaluation into the organization of health services (43).

Kroeger et al. (42) conducted a general review of office records. Abstracts of records in seven diagnostic categories were reviewed by ten physicians, who were asked to grade the quality of care rendered on a

one-to-four scale. Despite the absence of guidelines or criteria and the lack of uniformity in backgrounds, general agreement was found among the physician-judges.

Morehead (48) reviewed charts to evaluate neighborhood health center performance in delivering preventive health care. Her analyses did not encompass clinical management or follow-up of potential pathology, but reflected the adequacy of the basic history, physical, and laboratory data and preventive care for adult medicine, obstetrics, and pediatrics. Using the performance of the medical school affiliated outpatient department as a standard, the study rated the neighborhood health centers above the hospitals in adult medicine and pediatrics and slightly below them in obstetrical care.

Ciocco, Hunt, and Altman (9) analyzed services provided to 3,200 ambulatory patients who were seen for the first time by sixteen different medical groups. Utilizing case records as a source of data, they divided the diagnoses into eighteen categories and evaluated the relations between complaints. After correcting for such patient characteristics as age, sex, and diagnoses, the investigators concluded that differences in the amount of training and speciality status of the physicians accounted for much of the variation.

II. HEALTH SERVICES UTILIZATION

The financial cost of medical care has been considered to affect the utilization of service to a great extent. Cost alone may not be responsible for a difference since other factors such as economic status

of the consumer could also determine the degree of health care expenditures. A study conducted among California migrant farm workers concerning the effects of providing medical care facilities showed that the utilization rate of both preventive and therapeutic services increased markedly upon provision of an easily accessible clinic, suggesting that nonavailability of services influences the utilization rate to a greater extent than the removal of economic barriers (50). The task of treatment cannot be complete unless the social and psychological factors which might create barriers are recognized and possibly removed.

The effects of social and psychological barriers which prevent utilization of health services were investigated by Yeracaris (73). Two major hypotheses were developed.

1. Different social classes have different social values which, in turn, influence their behavior.

2. The cultural differences of various groups influence the rate of acceptance of medical innovations available to the members. It was concluded that the effectiveness of the health care program was dependent upon the health values and practices of the participants and their attitudes toward the program. It was suggested that in given heterogeneous social groups with conflicting values, a successful health care program should be designed according to the existing value differences.

In 1940, the Farm Security Administration studied selected farm families in eleven rural counties throughout the South; 1,714 low-income Blacks and Whites were studied. They held that the economic situation was a factor in disease causation. (50).

The National Center for Health Statistics reported that income is inversely related to days of disability. However, in the relationship of low income and ill health, it was difficult to determine which was the cause and which was the effect (41). No correlation was found to exist between episodes of acute illness and family size; but when figures were examined by family income, size, and race, there was a high relative ratio of activity limiting chronic conditions among those with low incomes.

Two types of acceptance toward existing health facilities were found in a survey of a community near Howard University, Washington, D.C., mostly inhabited by low-income Blacks. Forced Acceptance was measured by strict medical criteria, and it was found that there was a consistently high correlation between severity of illness and treatment obtained (67). The more serious a condition is, the more likely it is to receive medical care. Broad acceptance, on the other hand, was related to the middle class value system and a high correlation existed between broad acceptance and health care, but those individuals who are not adequately prepared experience both social and phychological problems.

A study of utilization of hospital services was conducted in New York City in an effort to establish use among consumer-sponsored group practice plans, health insurance plans, and medical society sponsored Blue Cross and Blue Shield plans (1). There were no indications that one method of payment resulted in higher utilization than another.

In a sample of seventy-seven members of a prepaid dental care program, Kegeles measured the respondents' perceived severity of these conditions, their beliefs about the benefits of preventive action, and

their perceptions of barriers to those actions (38). The findings were:

1. Of the three persons who were low on all variables, none made preventive visits.
2. Of the eighteen who were high on one variable but low on others, 61 percent made preventive visits.
3. Of the thirty-eight who were high on two variables, 66 percent made preventive dental visits.
4. Of the eighteen persons who were high on three variables, 78 percent made preventive visits.

In another study of utilization of services, Kegeles investigated the relationships among the use of Papanicolaon Tests, demographic factors, and beliefs in early detection of cancer (38). An analysis of the findings disclosed that Pap tests are much more likely to be taken by the young (aged 35-44) Caucasians, relatively well educated with higher incomes. Within every demographic grouping those who held a belief in the benefits were much more likely to take the test than those not holding the belief.

Anderson reported that Caucasions appear more likely to have preventive examinations than non-Caucasians, and women are more likely to see a doctor than men (1). A correlation existed between income levels and visits to the dentist among all age groups. Finally, the lowest income groups spent the largest proportion of their income for health services.

In a paper read before the American Statistical Association, Feldman stated:

> All other things being equal, a person who views doctors as having few faults should utilize their services more frequently than a more antagonistic person. Well, we have correlated attitudes toward doctors with the number of times a doctor has been seen during the past year, controlling by a rather refined index of perceived medical needs. This partial correlation still turns out to be close to zero. In general, it seems that if a person recognizes that he is ill, he will generally consult a doctor no matter when he thinks of the profession as a whole (22).

The National Health Service in Great Britain is one of the most comprehensive health services ever devised. Yet, in a study of a representative sample of families in London, 37 percent reported a member suffering pain or discomfort and not being treated (21).

From a survey of a representative sample of adults in the United States, 8 percent reported that twelve months prior to the interview they had not carried out physician's recommendations for hospitilization. Only 20 percent mentioned expenses as the reason for not following the recommendations (22). From the same survey, the researcher concluded that most people who do not see a dentist regularly do not do so simply because, in one way or another, they do not believe such visits to be necessary.

III. CONSUMER'S ROLE IN THE DELIVERY OF HEALTH SERVICES

A number of developments in the health field suggest some of the dimensions of a practice which is consumer, not doctor centered. Consumers contribute to their own health when they give an accurate history and follow the regimen presented by the doctors. Consumers can be operative in the delivery of health services and not mere token participation.

Illich and McKnight made the point that the sources of human health are varied (34). They included at lease four elements:

1. Self-activated behavior.
2. Communal behavior.
3. Environmental factors.
4. Therapeutic information.

Fuchs spoke to the same issue when he said the health of our society is far less dependent upon the number of doctors or professional personnel and much more dependent upon the attitudes, culture, and involvement of the users of the health services (24).

> It is becoming increasingly evident that many health problems are related to individual behavior. In the absence of dramatic breakthroughs in medical science, the greatest potential for improving health is through changes in what people do and do not do to and for themselves.

The professionally run system with its "doctor knows best" attitude was not only antithetical to a consumer focused practice, but there appeared to be evidence that it was not effective in terms of patient well-being on standard measures.

Glogow found that patients who adopted a compliant, nonquestioning attitude became what the doctors called a "good patient." On the contrary, the patients who were less compliant, the "bad patients," improved more quickly. He also found that doctors who use medical jargon a great deal, and thus fail to communicate with their patients, are less successful in terms of their patients' health (28).

Strauss described a series of steps necessary to enable those with chronic illnesses to cope with their illnesses and the concomitant crises:

1. The ability to read signs that pretend a crisis, e.g., a diabetic being able to recognize the sign of oncoming sugar shortage or insulin shock, or an epileptic being able to recognize an oncoming convulsion.
2. The ability to respond to the crisis of the moment. The diabetic who carries sugar or candy or insulin or the epileptic who stuffs handkerchiefs between their teeth just before convulsions.
3. The ability to establish and maintain a regimen. The extent a person is able to do this depends upon his or her belief in the efficacy of the regimen. (60, p. 33)

The maintenance of health requires that the patient participate in the treatment of his disease. It is necessary for the patient to be a willing, active partner in his own treatment. Szasy and Hollender described three-fold typology of doctor-patient relationships:

1. Activity-passivity—when the patient is incapable of participating as in the case of a coma.
2. Guidance-Cooperation—while ill, the patient is aware of what is happening and is capable of following directions.
3. Mutual participation—here the doctor helps the patient to help him (or her) self. (61)

The mutual participation approach is consumer involving. It has been well documented that involvement of the consumer adds to the efficiency of treatment.

IV. ATTITUDES OF THE CONSUMERS

Studies of the effects of socioeconomic factors upon the perception of symptoms and disease have produced inconsistent results. For example, Strauss (60) found that edema was considered an illness by emphysemic patients and their families, but that cigarette cough was normal and was not a reason to consult a doctor. The symptoms of an illness used as a basis for seeking care may vary for different diseases. Koos (40) established a relationship between educational and socioeconomic levels

of tolerance of symptoms of disease and consequent fears. Suchman (51) on the other hand, found few differences among various socioeconomic groups with regard to their interpretations of the symptoms of an illness.

A study was carried out in London, England, comparing attenders and nonattenders of medical services (21). The interviews revealed that nonattenders were usually older males who often denied having serious health problems. They did not use any other services, nor did they practice self-medication.

Contrary to the practice in England, self-medication was still the practice of some families on John's Island, South Carolina. In a recorded interview of Mrs. Janie Hunter, the story went thus:

> "We doesn't go to no doctor. My daddy used to cook medicine—herbs medicine; seamuckle, pine top, lison molasses, shoemaker root, ground moss, peachtree lear, big-root, bloodroot, red oak bark, terrywuk.
>
> "Now when my children have fever, I boil lison molasses; squeeze little lemon juice in it. Once they go to bed, it strike that fever right away. That something very good.
>
> "And you hear about children have worm? We get something call jimsey weed. You put it in a cloth and beat it. And when you done beat it, you squeeze the juice out of it, and you put four, five drop of turpentine in it, give children that to drink. You give a dose of castor oil behind 'em. You don't have to take em to no doctor.
>
> "If anybody fall down and break bone, my daddy get a towel and pour some water in the basin—put half a bottle of white vinegar in it. He hot the towel and bathe the leg in some mud. Go in the creek and get some mud, band that whole leg up in mud. Couple days you be walking. That knits it right back together.
>
> "For a cut, to stop 'em from bleeding, Daddy just get a big spoonful of sugar and throw 'em in there. He say once a cut stop bleeding it's not dangerous. Spider webs grow up in the house and you get that and tie 'em on. Web grow right in there.

> "If you get sores you get something you call St. John out in the field. And you see those little bump grow on a gum tree; you get them and you burn them two together and just tie 'em right on that wound. That heals right up.
>
> "When my little boy got a nail stuck in his feet, I got a basin of hot water with physic salt and let him hold he feet down in that—draw the poison out. Then I tie a piece of butts meat on it. His foot get better.
>
> "You hear about some little thing run back in its hole—fiddler crab? We use that for whooping cough. Catch the crab, boil 'em up with something else—I can't call the name—and strain 'em through a white cloth. Give that for drink. It'll cure the running whoop." (45)

In another recorded interview on John's Island, Mrs. Betsy Pinckney had this to say:

> "I sick one time, I sick 'til my mother and father give me up. Typhoid fever, gracious God! Oh that's a good God. I can prove it! . . . I see a white man come through and walk just past my bed. And you know what I tell him? I say, 'please, sir, could you read the fifteenth chapter and the psalm, The Lord is My Shepherd?' . . . He read the fifteenth chapter, then after he done read that, he turn to the Twenty-Third Psalm, and he read it for me . . . My spirit go on down to the river. Jesus! Gracious God have mercy! . . . Never sick so again yet! and that's the truth." (45)

Zboroski reported on the influence of cultural components in responses to spontaneous pain (74). His study indicated that pain acquires specific social and cultural significance. For example, Americans of Italian ancestry were concerned with the immediacy of the pain experiences and were disturbed by the actual pain while the concern of the American Jew was focused on the symptomatic meaning of pain and upon the significance of pain in relation to their future health and welfare and for the welfare of their families.

Koos, in his classic study of health in a community that he called "Regionville," identified three different classes based primarily on

income and attitudes of Regionville people toward illness which resulted in significantly different behavior patterns. These patterns were influenced by:

1. Fear
2. Concern about cost
3. The relative needs for treatment as related to age
4. The role of the individual in the family. (40)

Coe and Wesson used a sample of 1,800 recipients of health care to suggest that patients exhibit a "selective attention" to symptoms, meaning there is a wide variation in response to illness (11). These variations result from the patient's self-concept in terms of pain, incapacitation, disfigurement, and death. Fear, anxiety, and uncertainty of illnesses are related to the patient's lack of knowledge of an array of unusual medical instruments and unfamiliar sounds and smells. The researchers concluded that the therapist-patient interaction under conditions imposed by current medical practice may reinforce a threat to the patient's concept of self. This threat may account for the phenomena of "shopping" for a physician and may explain why patients visit chiropractors or other healers who must of necessity give personalized attention.

In a study of white, native-born protestant families in Yonkers, New York, that included school age children, many variables were discovered to influence the attention they paid to their health needs (50). However, the study indicated that income was not a crucial variable. Fear of physicians, the tendency to immediately gratify their materialistic needs, and the concern of the opinions of others were indicators of those who were more likely to be less concerned with their health.

Polgar wrote that when an adult perceives changes in the way he feels and starts to think about the possibility of sickness, he has begun a sequence of events that may or may not lead to an alteration in his social role (55). The author listed phases in health action that are directly related to the attitudes of the individual toward health and medical care. He concluded that "health workers who desire to pour out the 'new wine' of information to follow a Biblical parable, often see it spilled on the ground because they disregard the fact that clients already have established health customs and attitudes."

V. SUMMARY

As the incidence and prevalence of communicable diseases have been brought under control the problems of accident, chronic illnesses, and other problems have come to the fore. With the exception of traumatic accidents, these health problems have an insidious onset, and finally tend to have enormous psychosocial and financial impact upon the patient, his family, and society as a whole.

A major thrust in the evolution of a contemporary health service delivery system appears to be a decreased emphasis upon the prevention of disease processes, illnesses, and impairments. Prevention should include primary prevention, the prevention of the occurrence of disease; and secondary prevention, the early recognition and intervention in disease processes, even when they may be unrecognized by the patient. While it is important to have estimates of the prevalence of specific health problems in the general population, it is equally important to

identify specific subgroups who are at high or low risk for certain disorders.

Research findings indicate that certain cultural components are associated with attitudes toward health. Kriesberg gave two explanations for the association (41). The cultural explanation states that parents transmit to offspring attitudes and values which determine health behavior. The situational explanation means that there are some differences in pertinent attitudes and values, but they result from stratum-shared current situations. Thus, differing values and attitudes may be the result of current social pressures or the generalization of current experiences. Voting, obtaining a college education, and visiting medical facilities were situational factors that gave an indication of the relationship of socioeconomic class and behavior. The researcher concluded that health behavior and sickness behavior are related to socioeconomic rank primarily by situational factors.

A fundamental restructuring of health care systems was needed. Technique and process orientation must give way to social utility and problem solving in data collection programs. If needs of all health-related activities cannot be met, then, priorities must be established.

CHAPTER III

METHODOLOGY

This chapter discusses the methods used in conducting the research. First, attention is given to the selection of instruments and the development of techniques for determining the four areas of health care. Second, the selection of the areas and study sample sizes is discussed. Third is the administration of the instrument and the collection of the data. Fourth, the techniques for the analysis of the data are outlined.

I. SELECTION OF INSTRUMENT

The questionnaire used by Carlton in a Kentucky study served as a basis for the survey instrument used for this study (7). The questionnaire was designed to evoke responses in six major areas of health. The researcher was given permission by Carlton to simplify and modify the instrument to suit the objectives of the study and the population that it was intended for. The letter of request and permission to modify the instrument are contained in Appendix A.

The original instrument prepared by Carlton consisted of a total of sixty-eight items including attitude-belief scale items. The first modification used in the present study consisted of only fifty-eight of the sixty-eight original items. This draft was sent to the jurors for their corrections, suggestions, and ratings. The jurors were twelve health and medical professionals in Charleston County and in the State of South Carolina. See Appendix B for a list of the jurors.

Jurors were asked to rate each item from one to five, five being the highest rating. The jurors were also asked to make recommendations for changes.

Following the return of the instrument with comments, suggestions, and ratings, the researcher compiled the average scores of each item. The mean scores of each item were derived by dividing the total score of each item by the number of the raters. For example, Item 16 was rated by seven jurors as 4, 5, 3, 4, 4, 5, 5, which was 30. The computed average was 4.27.

In addition to giving guidance and suggestions, Dr. Robert Mason, Assistant Professor, Department of Biometry, Medical University of South Carolina, helped put the questionnaire in computer form.

The final instrument, shown in Appendix C, evoked responses to four areas of health care:

1. Health knowledge.
2. Attitudes and opinions toward medical care.
3. Health needs.
4. Utilization of clinic facilities on the Sea Islands of South Carolina.

II. SAMPLING

Several problems were encountered in the selection of the study sample. It was decided to select the sample from individual family units as determined from the Rural Mission, Incorporated, census print out.

The next problem was how each island could be equally represented according to the following characteristics:

1. Size
2. Socioeconomic levels
3. Population
4. Topographic location

The Rural Mission, Incorporated, printout of 1971 gave the gross population data for the five Sea Islands as 48,252, but the Office of Economic Opportunity eligibility population as 25,718. (See the tables in Appendix D.) The same printout showed a total of 6,864 family units with an average number of 3.85 persons per household (Table 47, Appendix D).

An accepted sample size, n, was determined by using Morgan and Krejcie's Small Sample Size for Research Activities Technique (49). The actual number needed was arrived at by using the following formula:

$S = \chi^2 NP (1-P) \div d^2 (N-1) + \chi^2 P (1-P)$,

S = required sample size,

χ^2 = the table value of chi-square for one degree of freedom at the desired confidence level (3.84),

N = the population size,

P = the population proportion (assumed to be fifty since this would provide the maximum sample size), and

D = the degree of accuracy expressed as a proportion (.05).

A minimum sample, n, was 364 for a population of 6,864 family units; rounded off to the nearest one thousand (Table 49, Appendix D). Thus, it

was decided to sample 364 family units in the five Sea Islands and conduct interviews with an adult member of each household.

The number of family units needing to be sampled on each island was next taken into consideration. Table 1 shows the number of family units on each island obtained from the Office of Economic Opportunity tract, using the units ratio.

Using the Sea Island Comprehensive Health Care Corporation's Primary Health Assistants' daily outreach activity tract, each island was further subdivided according to the family unit ratio to ensure the principle of random selection. In order to ensure the required number of sample subjects, the figures were consistantly rounded to the nearest whole number. Table 2 indicates the sample subjects needed from each zone in each island. Once the required numbers had been determined in each zone, procedures were to randomly select the individual family units to be interviewed.

The family units from each zone were numbered. Then a random number table was used to determine which family units were to be sampled. When it was apparent that the family units that were chosen could not be interviewed or had moved with the seasonal migrant workers group, another family unit was randomly selected using the random number table.

III. ADMINISTRATIVE PROCEDURES

A series of meetings was held to train the social and Primary Health Assistant workers. The administration of the survey instrument was carried out by fourteen members of the study team and the researcher.

TABLE 1

NUMBER OF FAMILY UNITS ON EACH ISLAND
AND NUMBER NEEDING TO BE SAMPLED

Islands	Number of Family Units	Number Needing to be Sampled
John's Island	1,127	60
Wadmalaw Island	263	14
James Island	4,061	215
Yonges Island	1,299	69
Edisto Island	114	6
TOTAL	6,864	364

TABLE 2

SAMPLE SUBJECTS NEEDED FROM EACH ZONE IN EACH ISLAND

Zones	John's Island Family Units		Wadmalaw Island Family Units		James Island Family Units		Yonges Island Family Units		Edisto Island Family Units	
	Pop.	Sample	Pop.	Sample	Pop.	Sample	Pop.	Sample	Pop.	Sample
1	225	12	39	2	944	50	264	14	20	1
2	94	5	52	3	661	35	339	18	17	1
3	376	20	75	4	1096	58	132	7	38	2
4	150	8	37	2	623	33	150	8	18	1
5	282	15	60	3	737	39	414	22	21	1
TOTAL	1,127	60	263	14	4,061	215	1,299	69	114	6

After the initial survey, an identification number was given to each social worker and Primary Health Assistant. Each island was given a code number, and each survey questionnaire was given an identification number. The names and addresses of the fourteen-member team can be found in Appendix E.

The approach used in the questionnaire administration was not that of a tightly controlled situation. The questions were highly explicit and designed to make self-administration of the instrument possible.

Three hundred and sixty-four family units were surveyed. The survey was a health education activity as well as a method to collect data. The collection of data was closely supervised at every stage to reduce the possibility of error, by the researcher.

IV. ANALYSIS OF DATA

Upon receipt of the completed questionnaire, the raw data were key punched on computer cards and verified for accuracy at the Medical University of South Carolina. The data were then analyzed using various statistical computer programs in the UCLA Biomedical (BMD) Computer Package which was available at the Medical University of South Carolina Computer Center.

Frequency histograms and percentages were calculated for responses on all questions. Two-way frequency tables were formed crossing questions 1, 2, 3, 4, 9, and 10 with questions 11 through 36. Appropriate chi-square tests were run with two-way tables to determine if significant differences existed, and accompanying correlation coefficients were calculated based on these tables.

Pooling was done when cell sizes were too small in the two-way table statistical tests, and histograms were run for individual islands as well as for the combined five Sea Islands areas.

In addition, the responses for the five Sea Islands were compared on the thirty-seven questions using chi-square tests. Differences were noted where appropriate.

CHAPTER IV

ANALYSIS AND DISCUSSION OF DATA

At the time of this study, the five Sea Islands of Edisto, James, John's, Wadmalaw, and Yonges constituted a large portion of Charleston County's rural and coastal area. Although a large part of the islands was suitable for some type of agriculture, the area had not been developed for industry or recreation; the reason for lack of such development was the lack of proper drainage.

All the islands had a high percentage of black residents except James Island, which was largely a suburban area and had a higher percentage of white residents. The sample was composed of 364 adults from these five islands. Responses varied from table to table because the sample do not answer some questions.

The distribution of the sample by age groups is shown in Table 3. The bulk of the sample (81.4 percent) was composed of active, mature adults in the most productive time period of human life—from twenty-five to fifty-five years of age. It was assumed that mature adults are generally more concerned about their health and should be able to take proper preventive and corrective actions.

Table 4 shows that 29.1 percent of the study sample were white, 70.1 percent were black, and 0.8 percent belonged to other races. Also, 48.9 percent were males and 51.1 percent were females.

TABLE 3

STUDY SAMPLE BY AGE

Age	Number	Percentage
15-24	24	6.8
25-34	54	15.2
35-44	67	18.8
45-54	76	21.3
55-64	93	26.1
65 and older	42	11.8
	356	

TABLE 4

STUDY SAMPLE BY RACE AND SEX

Race	Number	Percentage	Sex	Number	Percentage
White	106	29.1	Male	178	48.9
Black	255	70.1	Female	186	51.1
Other	3	0.8			
	364			364	

The marital status of the sample is shown in Table 5—69.6 percent were married, 11.9 percent were single, 4.4 percent were divorced, and 14.1 percent were widowed. The average size of family unit was 3.4 people.

TABLE 5

STUDY SAMPLE BY MARITAL STATUS

Status	Number	Percentage
Married	252	69.6
Single	43	11.9
Divorced	16	4.4
Widowed	51	14.1
	362	

Table 6 shows the percentage of children under and over eighteen years of age in each household—52.7 percent had between two and four children under eighteen, while 83.2 percent had only one or no children over eighteen years of age.

TABLE 6

PERCENTAGE AND NUMBER OF CHILDREN IN STUDY SAMPLE UNDER AND OVER EIGHTEEN YEARS OF AGE

Number of Children per Household	Under 18		Over 18	
	Number	Percentage	Number	Percentage
0-1	135	37.1	303	83.2
2-4	192	52.7	61	15.4
5-7	35	9.6	364	1.4
8-9	2	0.5	0	0.0
	364			

Table 7 summarizes the sample by educational levels. The data indicate that 9 percent had attended college, 36.8 percent had attended high school, 23 percent had attended junior high, 28.5 percent had a sixth grade or under education, and 2.5 percent had never attended school.

TABLE 7

STUDY SAMPLE BY LEVEL OF EDUCATION

Level of Education	Number	Percentage
Never attended school	9	2.5
Sixth grade or under	103	28.5
Attended junior high	83	23.0
Attended high school	133	36.8
Attended college	33	9.0
	361	

Ratings of the medical facilities and services that were available to the residents of the five Sea Islands are shown in Table 8. It is interesting to note that the facilities and the services received ratings from poor to excellent; but it is surprising to see that as many as 10.8 percent gave a fair rating to dental services and 21.2 percent rated the appointment clerks fair. Transportation services received a rating of 3.3 percent poor; appointment clerks received a rating of 2.5 percent poor, followed closely by dental services with 1.9 percent

poor, clinics with 1.4 percent poor, while only 0.5 percent of the sample rated the nursing services as poor.

TABLE 8

RATINGS BY STUDY SAMPLE OF MEDICAL FACILITIES AND SERVICES

Categories	Excellent	Good	Fair	Poor	N
Clinics	39.0%	53.3%	6.2%	1.4%	210
Doctor's services	33.8	60.4	4.8	1.0	207
Dental services	28.5	58.9	10.8	1.9	158
Transportation	22.1	65.2	9.4	3.3	181
Appointment clerks	18.2	58.1	21.2	2.5	203
Nurses	27.3	64.9	7.3	0.5	205
Primary Health Assistants	35.4	57.6	6.1	1.0	198

When responding to the question of home visits by doctors, as presented in Table 9, 16.2 percent of the sample were having trouble, 18.4 percent were having no trouble at all, and 58.8 percent did not give any judgment.

Table 10 contains responses to questions about the need for a medical examination—70.9 percent favored an annual medical examination, while 29.1 percent indicated that it was not worth the trouble.

TABLE 9

TROUBLE EXPERIENCED BY STUDY SAMPLE IN GETTING A DOCTOR TO COME TO THE HOME

Categories	Number	Percentage
A whole lot	58	16.2
A little	24	6.7
No trouble at all	66	18.4
Don't know	211	58.8
	359	

TABLE 10

NEED PERCEIVED BY STUDY SAMPLE FOR MEDICAL EXAMINATION

Categories	Number	Percentage
Get exam every year or so	258	70.9
Not worth the trouble	106	29.1
	364	

Table 11 shows the sample responses to the question of how many physician contacts there were within one year—56.6 percent indicated one to five physician contacts in one year; 24.4 percent indicated six to ten contacts; 9 percent had eleven to fifteen contacts, and 3.1 percent indicated sixteen or more physician contacts in one year.

TABLE 11

TOTAL PHYSICIAN CONTACTS EXPERIENCED BY STUDY SAMPLE IN ONE YEAR

Categories	Number	Percentage
None	25	7.0
1-5 times	202	56.6
6-10 times	87	24.4
11-15 times	32	9.0
16 times or more	11	3.1
	357	

The subjects were asked if they received medical care from someone who was not a regular doctor. Table 12 shows that as many as 20.9 percent went to chiropractors, 0.8 percent went to root doctors, and 0.3 percent went to witch doctors; 2 percent indicated belief in the spiritual healing of Reverend Ike.

TABLE 12

MEDICAL CARE RECEIVED BY STUDY SAMPLE

Categories	Number	Percentage
Doctors	276	75.8
Chiropractors	76	20.9
Witch doctors	1	0.3
Root doctors	3	0.8
Reverend Ike	8	2.2
	364	

The three preceding tables indicate at least lip service when it comes to concern for preventive health measures and also indicate that the majority took proper corrective but not preventive actions.

Table 13 shows that 68.9 percent visited a dentist regularly, while 31.1 percent did not. Although more of the sample favored regular dental visits, the number that did not provide justification for the health agencies on the islands to initiate a program to promote dental or oral hygiene, among this age group.

TABLE 13

NEED PERCEIVED BY STUDY SAMPLE FOR DENTAL CARE

Categories	Number	Percentage
See a dentist regularly	250	68.9
Not worth trouble	113	31.1
	363	

Medical insurance received the support of the subjects. Table 14 shows the responses—72.4 percent thought it was a good idea while only 27.6 percent thought they were as well off without it. This indicates a population that definitely endorsed a type of insurance that covers medical expenses. The people believed that such insurance would help them improve their health. The sample perceived insufficient money or income to be a major barrier to good health.

TABLE 14

NEED PERCEIVED BY STUDY SAMPLE FOR MEDICAL INSURANCE

Categories	Number	Percentage
Good idea	262	72.4
As well off without it	100	27.6
	362	

When asked about the sources of health information, the subjects indicated that newspaper columns on health and medicine were not primary sources of health information. Table 15 indicates that 45 percent never read newspaper health columns; 17.2 percent hardly ever did, and 23.9 percent did every now and then. Only 13.9 percent read the health column most all of the time.

TABLE 15

FREQUENCY OF READING HEALTH COLUMN IN NEWSPAPERS BY STUDY SAMPLE

Categories	Number	Percentage
Most all of the time	50	13.9
Every now and then	86	23.9
Hardly ever	62	17.2
Never	162	45.0
	360	

Table 16 shows the responses of the sample when they were asked about radio and television programs as sources of health information—36.5 percent never listened to or watched any programs, 33.1 percent indicated every now and then, 22.7 percent a whole lot, and 7.7 percent hardly ever. However, efforts should be made to promote the utilization of these sources of health information. The number indicating that they utilized these sources of information was well below the 70.9 percent which expressed concern over preventive measures in the earlier table.

TABLE 16

FREQUENCY OF LISTENING TO RADIO AND TELEVISION PROGRAMS BY STUDY SAMPLE

Categories	Number	Percentage
A whole lot	82	22.7
Every now and then	120	33.1
Hardly ever	28	7.7
Never	132	36.5
	362	

These data indicate that many people obviously did not read about health to any extent in newspapers and magazines or listen to programs that might be available on radio and television. Therefore, to rely upon these media as the primary method for health education would be a mistake and should be avoided.

When the subjects were asked about their incomes and economic conditions of people on the islands, 43.2 percent thought family income would stay about the same for the next several years, 29.1 percent thought family income would be worse, and 27.7 percent thought it would be better. This compares with 39.3 percent who thought the overall income of the people would stay about the same, while 35.5 percent thought it would be worse and only 25.2 percent thought it would be better (Table 17).

TABLE 17

FINANCIAL AND ECONOMIC CONDITIONS AS PERCEIVED BY STUDY SAMPLE

Categories	People's Income		Family Income	
	Number	Percentage	Number	Percentage
Better off	91	25.2	100	27.7
About the same	142	39.3	156	43.2
Worse off	128	35.5	105	29.1
	361		361	

The subjects' knowledge of signs and symptoms of diseases was very limited, as indicated by the significant number not responding to the questions. The significant features of data presented in Table 18 are the high percentage who felt cancer, diabetes, and high blood pressure might be catching—20.2 percent said diabetes might be catching; 17.2 percent said that cancer might be catching, and 12.3 percent indicated the same for high blood pressure. While lack of information of this sort does

not necessarily imply a dangerous degree of ignorance, improving the knowledge of diseases and disease symptoms should be a major objective of the Sea Island Comprehensive Health Care Corporation.

TABLE 18

ILLNESSES CONSIDERED CONTAGIOUS BY STUDY SAMPLE

Categories	Considered Contagious		Not Considered Contagious	
	Number	Percentage	Number	Percentage
Cancer	52	17.2	250	82.8
Diabetes	61	20.2	241	79.8
Blood pressure	37	12.3	265	87.7

N = 302.

Table 19 shows some degrees of the subjects' knowledge of signs and symptoms of cancer. The majority of the subjects responded correctly that a lump, loss of appetite, and irregular bleeding were symptoms of cancer. However, 33.5 percent erroneously felt that stomach pains were a symptom, 31.5 percent thought frequent urination was, and 23.8 percent felt that failing vision was a symptom.

The subjects' knowledge of the symptoms of sugar diabetes was interesting. The majority indicated correctly that losing weight and slow healing of infections were symptoms, but only 42.7 percent recognized shortness of breath—58.2 percent erroneously indicated that itching was

TABLE 19

KNOWLEDGE OF STUDY SAMPLE REGARDING SYMPTOMS OF CANCER

Possible Symptoms	Yes	No	Number
*Any lump, especially in the breast, lip or tongue	77.0%	23.0%	361
*Loss of appetite or continual indigestion	58.9	41.1	358
*Any irregular or unexplained bleeding	63.6	36.4	360
Stomach pains	33.5	66.5	358
Failing vision	23.8	76.2	357
Frequent urination (passing water)	31.5	68.5	356

*Correct responses.

a symptom of sugar diabetes, 33.3 percent thought loss of memory, and 31.8 percent thought lower backache were symptoms of diabetes in Table 20.

Table 21 shows the responses of the sample to the questions on high blood pressure. Almost three-quarters of the sample correctly recognized the symptoms of headaches in the back of the head and dizziness as symptoms, and almost half recognized that shortness of breath was a symptom. However, 37.6 percent erroneously thought that extreme thirst was a symptoms of high blood pressure; 34.0 percent thought frequent urination and 27.0 percent thought hunger were symptom.

A review of the preceding three tables reveals that although the majority of the responses was correct, the knowledge of disease symptoms was not extremely high. It is obvious that the doctors, the nurses, and

TABLE 20

KNOWLEDGE OF STUDY SAMPLE REGARDING
SYMPTOMS OF SUGAR DIABETES

Possible Symptoms	Yes	No	Number
*Losing weight	64.3%	35.7%	359
Backache, lower part of back	31.8	68.2	355
Itching	58.2	41.8	359
*Shortness of breath	42.7	57.3	356
*Slow healing of infections	67.5	32.5	357
Loss of memory	33.3	66.7	354

*Correct responses.

TABLE 21

KNOWLEDGE OF STUDY SAMPLE REGARDING SYMPTOMS
OF HIGH BLOOD PRESSURE

Possible Symptoms	Yes	No	Number
*Headaches in the back of head	73.1%	26.9%	360
Frequent urination	34.0	66.0	356
Extreme thirst	37.6	62.4	356
*Dizziness	71.4	28.6	360
Hunger	27.0	73.0	355
*Shortness of breath	48.0	52.0	358

*Correct responses.

the media had not succeeded in educating the people with regard to disease signs and symptoms.

Responses to questions about illnesses are shown in Table 22—63.1 percent of the sample said that they had trouble with their eyes; lack of appetite was next most common with 48.9 percent. Bad teeth and hearing trouble ranked third and fourth, with 47.9 and 32.7 percent respectively. Health problems were mentioned frequently as conditions suffered by the sample. However, responses to several questions might suggest emotional problems of equal importance are possibly due to economic instability. This table shows a population in which sickness was common. The results indicate that symptoms of both mental and physical illnesses were perceived as major problems by the population.

TABLE 22

HEALTH NEEDS AS PERCEIVED BY STUDY SAMPLE

Condition	Yes	No	Number
Do you have trouble with your eyes?	63.1%	36.9%	358
Do you have trouble with your hearing?	32.7	67.3	355
Do you have any bad teeth?	47.9	52.1	357
Do you often have bad headaches?	32.0	68.0	356
Do you ever have a pain in the chest?	29.8	70.2	356
Do you suffer from indigestion?	20.4	79.6	357
Have you lost a lot of weight lately without dieting?	10.4	89.3	356
Have you had any trouble with urination (passing water)?	7.9	92.1	356
Do you have trouble sleeping?	23.5	76.5	357
Do you eat good when you sit down to the table?	48.9	51.1	358

The relationship of age to the data previously discussed is shown next. Table 23 shows that the reading of newspapers decreased with age—57.1 percent of those 65 years and over indicated that they never read the newspaper and 50 percent of the 45- to 54-year-old group said never; however, only 16.7 percent of the 15- to 24-year-old group indicated never, and 69.6 of the 55- to 64-year-old group said never.

TABLE 23

NEWSPAPERS AS A SOURCE OF INFORMATION FOR STUDY SAMPLE BY AGE

Age Group	Newspapers							
	Most Time		Now and Then		Hardly Ever		Never	
	No.	%	No.	%	No.	%	No.	%
15-24	3	12.5	12	50.0	5	20.8	4	16.7
25-34	16	30.8	14	26.9	12	23.1	10	19.2
35-44	12	18.2	21	31.8	13	19.7	20	30.3
45-54	7	9.2	19	25.0	12	15.8	38	50.0
55-64	7	7.6	12	13.0	9	9.8	64	69.6
65 and over	2	4.8	6	14.8	10	23.8	24	57.1

$\chi^2 = 60.17$ df = 12 N = 352

Radio and television as the source of health information worked well for the young but the older sample failed to utilize these media (Table 24)—47.4 percent of the 45- to 54-year-old group indicated that they had never listened to one program. The percentage is even higher amoung the 55- to 64-year-old age group—57.6 percent never listened to any program, and 33.3 percent of those 65 years old and over said never.

TABLE 24

RADIO AND TELEVISION AS A SOURCE OF HEALTH INFORMATION FOR STUDY SAMPLE BY AGE

Age Group	Radio and Television							
	Most Time		Now and Then		Hardly Ever		Never	
	No.	%	No.	%	No.	%	No.	%
15-24	4	16.7	15	62.5	3	12.5	2	8.3
25-34	14	26.4	28	52.8	6	11.3	5	9.4
35-44	22	32.3	17	25.4	6	9.0	22	32.8
45-54	13	17.1	22	28.9	5	6.6	36	47.4
55-64	13	14.1	23	25.0	3	3.3	53	57.6
65 and over	11	26.2	14	33.3	3	7.1	14	33.3

$\chi^2 = 54.84$ df = 8 N = 354

The data for this sample indicated that the older a person the less is his interest in reading. One would expect that the parents should be able to buy newspapers and listen to radio and television.

Eye trouble seemed to be a major concern of the residents of these islands (Table 25). The age group of 15 to 24 years had a 34.8 percent rate of eye trouble, while those 65 years old and over recorded 78.6 percent. Hearing problems followed the same pattern, but not as badly. Only 13 percent of the 15- to 24-year-old group were having trouble as compared to 42.2 percent of the 55- to 64-year-old group or 45.2 percent of those 65 years old and over. Table 25 shows a higher percentage of the young ones having bad teeth while the case with the aged was low. One should be careful not to generalize here. The young

TABLE 25

HEALTH PROBLEMS AS PERCEIVED BY STUDY SAMPLE BY AGE

Age Group	Perceived Health Needs											
	Eye Trouble				Hearing Trouble				Bad Teeth			
	Yes		No		Yes		No		Yes		No	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
15-24	8	34.8	15	65.2	3	13.0	20	87.0	12	52.2	11	47.8
25-34	26	48.1	28	51.9	6	11.1	48	88.9	28	51.9	26	48.1
35-44	40	60.6	26	39.4	20	30.3	46	69.7	37	56.1	29	43.9
45-54	53	70.7	22	29.3	28	37.3	47	62.7	40	53.3	35	46.7
55-64	63	68.5	29	31.5	38	42.2	52	57.8	30	33.0	61	67.0
65 and over	33	78.6	9	21.4	19	45.2	23	54.8	20	47.6	22	52.4
χ^2	20.64				23.13				11.28			
	5				5				5			
N	352				350				351			

ones were concerned, while the aged cared less; or, it might be due to the excessive consumption of sweets by the young.

All ages had contacts with physicians about one to five times a year, but very few saw a doctor over ten times a year. As expected, Table 26 shows the young saw a doctor the least often. Contacts with a doctor were more frequent the older the subject. Two things could be said here; the younger ones were worrying less, or the aged were more careful. However, younger groups were shown to have greater concern for preventive measures. This promises healthier future generations.

The younger ones favored medical examinations, while the middle-aged residents cared less (Table 27). At the middle age of 35 to 44, the support for medical examination dropped to 74.6 percent. This support for medical examination fell to the low of 48.4 percent with the 55- to 64-year-old age group. At 65 and above, the trends changed to a high of 85.7 percent favoring medical examinations. Dental visits and medical insurance followed the same pattern. Younger and older groups appeared to have a better health attitude towards their health care and were taking measures to preserve it.

The next set of tables compared the data as to race. Blacks read the newspaper more than Whites. Blacks rely more on newspaper as their source of health information. Table 28 shows that 78.3 percent of the Whites said they never read the newspaper for health information as compared to 30.6 percent of the Blacks. It was very difficult to attribute a reason to this finding. While it might be right to say that the income of the Whites allowed the luxury of buying and reading newspapers, it might be

TABLE 26

PHYSICIAN CONTACTS PER YEAR OF STUDY
SAMPLE BY AGE

Age Group	Physician Contact									
	None		1-5 times		6-10 times		11-15 times		16 and over	
	No.	%	No.	%	No.	%	No.	%	No.	%
15-24	6	26.1	13	56.5	3	13.0	0	0.0	1	4.3
25-34	1	1.9	38	71.7	7	13.2	2	3.8	5	9.4
35-44	3	4.5	44	66.7	15	22.7	4	6.1	0	0.0
45-54	9	12.0	36	48.0	16	21.3	11	14.7	3	4.0
55-64	3	3.3	44	48.4	32	35.2	12	13.2	0	0.0
65 and over	2	7.3	19	46.3	14	34.1	3	7.3	2	4.9

$\chi^2 = 20.16$ df = 8 N = 349

TABLE 27

HEALTH ATTITUDES OF STUDY SAMPLE BY AGE

Age Group	Health Attitudes											
	Medical Exam				Dental Visit				Medical Insurance			
	Yes		No		Yes		No		Yes		No	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
15-24	23	95.8	1	4.2	22	91.7	2	3.3	21	87.5	3	12.5
25-34	50	92.6	4	7.4	50	92.6	4	7.4	48	88.9	6	11.1
35-44	50	74.6	17	25.4	51	76.1	16	23.9	55	82.1	12	17.9
45-54	46	60.5	30	39.5	45	59.2	31	40.8	48	64.0	27	36.0
55-64	45	48.4	48	51.6	41	44.6	51	55.4	47	51.1	45	48.9
65 and over	36	85.7	6	14.3	34	81.0	8	19.0	36	85.7	6	14.3
χ^2	50.52				52.74				40.17			
df	5				5				5			
N	356				355				354			

true to say that the Blacks had more inclination to read the newspapers. Language barriers may be the reason for the only two persons of other races that indicated never.

TABLE 28

NEWSPAPER AS A SOURCE OF HEALTH INFORMATION FOR STUDY SAMPLE BY RACE

Races	Newspaper								
	Most Time		Now and Then		Hardly Ever		Never		N
	No.	%	No.	%	No.	%	No.	%	
White	4	3.8	8	7.5	11	10.4	83	78.3	106
Black	46	18.3	78	31.0	51	20.2	79	30.6	252
Other	0	0.0	0	0.0	0	0.0	2	100.0	2

$\chi^2 = 68.97$ df = 3 N = 360

Radio and television programs were not reaching the Whites (Table 29)—84 percent of the Whites said they had never seen or heard a program for health information as compared to 16.1 percent of the Blacks that said never. Since television is considered to be a common possession, it can be concluded that accessibility was not the problem. The two persons of other races said never. Language barriers and accessibility may be factors.

TABLE 29

RADIO AND TELEVISION AS A SOURCE OF HEALTH INFORMATION FOR STUDY SAMPLE BY RACE

Race	Radio and Television							
	Most Time		Now and Then		Hardly Ever		Never	
	No.	%	No.	%	No.	%	No.	%
White	4	3.8	9	8.5	4	3.8	89	84.0
Black	78	30.5	111	43.7	24	9.4	41	16.1
Other	0	0.0	0	0.0	0	0.0	2	100.0

$\chi^2 = 146.85$ df = 3 N = 362

Eye trouble, hearing trouble, and bad teeth were common problems. Table 30 shows 69.8 percent of the Whites and 60.6 percent of the Blacks were having eye trouble. Hearing was a major problem. There was a significant difference in hearing trouble as perceived by the Whites—54.3 percent indicated that they had trouble hearing as compared with 23.5 percent of the Blacks. Analysis of the data revealed bad teeth to be of no problem to the black race—41.9 percent of the Whites had bad teeth as compared with 49.8 percent of the Blacks. The table shows that Whites had slightly more eye trouble, but less hearing trouble and less bad teeth. This could be the result of diet, environment, or heritage. Other races (three persons) indicated 100 percent incident of bad teeth and 33.3 percent of eye and 33.3 percent hearing troubles.

TABLE 30

HEALTH PROBLEMS AS PERCEIVED BY STUDY SAMPLE BY RACE

Race	Perceived Health Needs											
	Eye Trouble				Hearing Trouble				Bad Teeth			
	Yes		No		Yes		No		Yes		No	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
White	74	69.8	32	30.2	57	54.3	48	45.7	44	41.9	61	58.1
Black	151	60.3	98	39.4	58	23.5	189	76.5	124	49.8	125	50.2
Other	1	33.3	2	66.7	1	33.3	2	66.7	3	100.0	0	0.0
χ^2	2.89				31.65				2.14			
df	1				1				1			
N	358				355				357			

Physician contacts of the study sample (Table 31) had an interesting pattern in that Whites had a relatively normal distribution, but it was of interest to observe that the Blacks had more contacts in the eleven to fifteen times per year category than Whites. This indicates the Blacks have more health problems. It is of interest to note the drop in physician contacts in the 16 and over category. The Whites had zero compared with 4.4 percent for the Blacks.

TABLE 31

PHYSICIAN CONTACTS PER YEAR OF STUDY SAMPLE BY RACE

Race	Physician Contacts									
	None		1-5 times		6-10 times		11-15 times		16 and over	
	No.	%	No.	%	No.	%	No.	%	No.	%
White	7	6.6	64	60.4	30	28.3	5	4.7	0	0.0
Black	18	7.3	137	55.2	57	23.0	25	10.1	11	4.4
Other	0	0.0	1	33.3	0	0.0	2	66.7	0	0.0

$\chi^2 = 8.09$ df = 3 N = 357

Whites revealed worse attitudes than Blacks toward medical examinations, dental visits, and medical insurance (Table 32)— 81.1 percent of the Whites said they saw no need for medical examination; 76.4 percent felt no need for dental visits, and only 72.6 percent saw no need for medical insurance. This indicates that the majority of Whites had negative attitudes, and were less concerned with preventive and insurance measures. Since Table 31 shows higher percentage of Whites as having more health problems,

TABLE 32

HEALTH ATTITUDES OF STUDY SAMPLE BY RACE

Race	Health Attitudes											
	Medical Exam				Dental Visits				Medical Insurance			
	Yes		No		Yes		No		Yes		No	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
White	20	18.9	86	81.1	25	23.6	81	76.4	29	27.4	77	72.6
Black	235	92.2	20	7.8	223	87.8	31	12.2	230	90.9	23	9.1
Other	3	100.0	0	0.0	2	66.7	1	33.3	3	100.0	0	0.0
χ^2	196.00				143.21				151.93			
df	1				1				1			
N	364				363				362			

one would expect a more favorable response from the Whites than the Blacks. This might be the result of better health attitudes of the Blacks as regards the utilization of health facilities and services that are available on the islands.

When comparing the sex of the sample, it was surprising to find in Table 33 that females read newspapers more than males—59.4 percent of the males said they never read the newspapers as compared with 31.4 percent of the females.

TABLE 33

NEWSPAPERS AS A SOURCE OF HEALTH INFORMATION FOR STUDY SAMPLE BY SEX

Sex	Newspaper								
	Most Time		Now and Then		Hardly Ever		Never		N
	No.	%	No.	%	No.	%	No.	%	
Male	17	9.7	31	17.7	23	13.1	104	59.4	175
Female	33	17.8	55	29.7	39	21.1	58	31.4	185

$\chi^2 = 28.75$ df - 3 N = 360

For radio and television (Table 34), the pattern was the same. The life pattern on the islands showed the men to be the working force. Most of the women were housewives and had greater access to television. Females could reasonably be expected to be more interested in health and health care due to their roles as mothers.

TABLE 34

RADIO AND TELEVISION AS A SOURCE OF HEALTH INFORMATION FOR STUDY SAMPLE BY SEX

Sex	Radio and Television								
	Most Time		Now and Then		Hardly Ever		Never		N
	No.	%	No.	%	No.	%	No.	%	
Male	27	15.3	36	20.5	12	6.8	101	57.4	176
Female	55	29.6	84	45.2	16	8.6	31	16.7	186

$\chi^2 = 66.23$ df = 3 N = 362

Health needs for the males and the females were very close (Table 35). Eye trouble and bad teeth rated almost the same, but hearing trouble was more prevalent in males than in females—41.1 percent of the males indicated hearing trouble compared with 24.4 percent of the females. It is within reason for the researcher to conclude that both males and females were equally unhealthy as their perceived health needs were about the same.

Men and women rated similarly in regards to the number of annual physician contacts (Table 36). It may be that women's greater concern caused them to visit the doctor for less cause than men, or that men and women were simply equally healthy, ruling out any difference in visits to doctors due to occupational hazards.

That females have better health attitudes has been reflected by the previous data. Table 37 presents data which further supports this finding. Females are shown to have a better health attitude than males—

TABLE 35

HEALTH PROBLEMS AS PERCEIVED BY
STUDY SAMPLE BY SEX

Sex	Perceived Health Needs									
	Eye Trouble				Hearing Trouble				Bad Teeth			
	Yes		No		Yes		No		Yes		No	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Male	108	61.7	67	38.3	72	41.1	103	58.9	76	43.4	99	56.6
Female	118	64.5	65	35.5	44	24.4	136	75.6	95	52.2	87	47.8
χ^2	0.29				11.24				2.75			
df	1				1				1			
N	358				355				357			

TABLE 36

PHYSICIAN CONTACTS PER YEAR OF STUDY
SAMPLE BY SEX

Sex	Physician Contacts									
	None		1-5 times		6-10 times		11-15 times		16 and over	
	No.	%	No.	%	No.	%	No.	%	No.	%
Male	13	7.5	99	56.9	44	25.3	14	8.0	4	2.3
Female	12	6.6	103	56.3	43	23.5	18	9.8	7	3.8

$\chi^2 = 1.22$ df = 4 N = 357

TABLE 37

HEALTH ATTITUDES OF STUDY SAMPLE BY SEX

Sex	Health Attitudes											
	Medical Exam				Dental Visit				Medical Insurance			
	Yes		No		Yes		No		Yes		No	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Male	88	49.4	90	50.6	86	48.6	91	51.4	96	54.2	81	45.8
Female	170	91.4	16	8.6	164	88.2	22	11.8	166	89.7	19	10.3
χ^2	77.58				66.29				56.99			
df	1				1				1			
N	364				363				362			

91.4 percent of the females favored annual medical examination compared with 49.4 percent of the males. Dental visits were equally relatively rated. Medical insurance was of importance to the females. Only 10.3 percent of the females felt no need for medical insurance compared with 45.8 percent of the males. Preventive measures and insurance could be of more concern to females because of their greater interest in good family health.

The last variable studied was education. Education has a big effect on the reading of newspapers (Table 38). It might be because those who attended college had other sources to contact for better and more recent information. Data show that those with a moderate amount of education tend to utilize newspapers more than those with less education or those who attended junior high. This may be due to those with less education being less able to read and understand or not recognizing the need, while the higher educated believed themselves to have gained sufficient knowledge already and were now reading for pleasure and latest findings.

Education had some influence in the utilization of radio and television as sources of health education and/or information (Table 39). Those that had a sixth grade or under and high school education were using these media to some extent. Programs on the radio and television were of interest to the sixth graders and those who attended high school. This may indicate that those who never attended school were not compensating for their lack of formal education through the radio and television.

TABLE 38

NEWSPAPERS AS A SOURCE OF HEALTH INFORMATION
FOR STUDY SAMPLE BY EDUCATION

Education Level	Newspaper							
	Most Time		Now and Then		Hardly Ever		Never	
	No.	%	No.	%	No.	%	No.	%
Never attended school	1	11.1	1	11.1	0	0.0	7	77.8
Sixth grade or under	7	6.9	18	17.6	22	21.6	55	53.9
Attended junior high	5	6.1	11	13.4	10	12.2	56	68.3
Attended high school	26	19.7	47	35.6	24	18.2	35	26.5
Attended college	11	33.3	9	27.3	5	15.2	8	24.2

$\chi^2 = 56.14$ df = 6 N = 358

TABLE 39

RADIO AND TELEVISION AS A SOURCE OF HEALTH INFORMATION FOR STUDY SAMPLE BY EDUCATION

Education Level	Radio and Television							
	Most Time		Now and Then		Hardly Ever		Never	
	No.	%	No.	%	No.	%	No.	%
Never attended school	1	11.1	2	22.2	1	11.1	5	55.6
Sixth grade or under	18	17.6	38	37.3	11	10.8	35	34.3
Attended junior high	10	12.0	17	20.5	2	2.4	54	65.1
Attended high school	37	27.8	56	42.1	9	6.8	31	23.3
Attended college	15	45.5	7	21.2	5	15.2	6	18.2

$\chi^2 = 52.59$ df = 6 N = 360

Those who attended high school perceived their health needs to be about as great as any other group except for hearing trouble, where they reported fewer problems (Table 40). Sixth grade or under surprisingly showed a lesser concern for bad teeth as compared to attended high school. All perceived some eye trouble in the statistical sense. In terms of perceived health needs, Table 40 shows a general pattern, in that all educated groups, high school and above, reported eye trouble and no hearing trouble. There was a slight trend for the more educated to perceive dental health problems more than those with less education. It may be that the educated group knew the essence of taking preventive measures and were doing so, while those with less education cared less.

Table 41 shows that the number of physician contacts of those who never attended school (eleven to fifteen times per year) was high—37.5 percent. In the same category, junior high was 9.8 percent and high school was 2.3 percent. Sixth grade and under (15.7 percent) and those who attended college (6.1 percent) rated second to high school. Those who attended high school were shown to have fewer overall contacts with doctors than any other group—2.3 percent indicated that they saw a doctor eleven to fifteen times in a year.

Table 42 shows the association between education and attitudes toward medical examinations, dental visits, and medical insurance. Those that attended junior high school did not favor medical examinations—56.6 percent saw no need for dental visits; 45.8 percent

TABLE 40

HEALTH PROBLEMS AS PERCEIVED BY STUDY SAMPLE BY EDUCATION

Education Level	Perceived Health Needs											
	Eye Trouble				Hearing Trouble				Bad Teeth			
	Yes		No		Yes		No		Yes		No	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Never attended school	6	66.7	3	33.3	4	44.4	5	55.6	3	33.3	6	66.7
Sixth grade or under	72	69.9	31	30.1	42	41.2	60	58.8	46	44.7	57	55.3
Attended junior school	54	65.1	29	34.9	36	43.4	47	56.6	31	37.3	52	62.7
Attended high school	76	58.5	54	41.5	28	21.7	101	78.3	74	57.4	55	42.6
Attended college	18	58.1	13	41.9	6	20.0	24	80.0	16	51.6	15	48.4
χ^2	3.73				17.39				9.28			
df	3				3				3			
N	356				353				355			

TABLE 41

PHYSICIAN CONTACTS PER YEAR OF STUDY
SAMPLE BY EDUCATION

Education Level	Physician Contacts									
	None		1-5 times		6-10 times		11-15 times		16 and over	
	No.	%	No.	%	No.	%	No.	%	No.	%
Never attended school	0	0.0	3	37.5	2	25.0	3	37.5	0	0.0
Sixth grade or under	9	8.8	45	44.1	30	29.4	16	15.7	2	2.0
Attended junior high	2	2.4	45	54.9	26	31.7	8	9.8	1	1.2
Attended high school	10	7.8	84	65.1	26	20.2	3	2.3	6	4.7
Attended college	4	12.1	24	72.7	1	3.0	2	6.1	2	6.1

$\chi^2 = 19.94$ df = 4 N = 354

TABLE 42

HEALTH ATTITUDES OF STUDY SAMPLE BY EDUCATION

Education Level	Health Attitudes											
	Medical Exam				Dental Visit				Medical Insurance			
	Yes		No		Yes		No		Yes		No	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Never attended school	5	55.6	4	44.4	2	22.2	7	77.8	7	77.8	2	22.2
Sixth grade or under	81	78.6	22	21.4	78	75.7	25	24.3	81	79.4	21	20.6
Attended junior high	36	43.4	47	56.6	36	43.4	47	56.6	38	45.8	45	54.2
Attended high school	105	78.9	28	21.1	105	78.9	28	21.1	107	80.5	26	19.5
Attended college	28	84.8	5	15.2	27	81.8	6	18.2	27	81.8	6	18.2
χ^2	39.43				34.28				37.68			
df	3				3				3			
N	361				361				360			

felt a need for medical insurance. The socioeconomic strata of this group might be the factor. Never having attended school, they might prefer to utilize either medicaid or medicare benefits or welfare, while the sixth grade group might be caught in the economic tangle. At worst, they might care less.

In summation the sample definitely was not happy about the state of their health. Many were not satisfied with their family income; a population that is pessimistic about their health may present special problems for health educators.

Several other questions were directed to the respondents whose answers gave indications of concern for their health. The subjects were asked if they listened to radio and television programs. It appears that they thought about their health often, but did not do anything about it. It could be that they did not have the incentive or initiative to discuss their health status except at times when they were sick and had to go to the clinic or to see a doctor. Unfortunately, the Sea Island Comprehensive Health Care Corporation was not doing anything in terms of patient education, health education, and/or health information.

Also, the majority realized that some diseases were not contagious, but health education efforts were definitely needed to make the population more knowledgeable of diseases. Responses to the items about services of doctors and appointment clerks revealed that a segment of the sample was unhappy with these services. It appears that real communication problems existed between the appointment clerks, the physicians, and the consumers.

The aged had more serious health problems. Females were healthier and had better health attitudes than males. Analysis of data revealed that Blacks had better health attitudes than Whites. Education had a significant effect on the utilization of the media. The educated group knew the importance of taking preventive measures and were doing so, while those with less education cared less.

This survey reflects the utilization of services and facilities. It covered relationships and factors involved in the health of the Sea Island residents. Much of the data only substantiated what would not be the expected relationship, that is the aged had less health problems than the young. The survey did establish a need for better use of the media as a health education tool.

CHAPTER V

SUMMARY, FINDINGS, AND RECOMMENDATIONS

This chapter gives a general view of the study—the purpose, procedure, and findings of the study, based on the statistical analysis of the data. Conclusions were made and recommendations were given by the researcher.

I. SUMMARY

The purpose of this study was to make recommendations for and the development of models for new programs and to improve existing health services as indicated by the perceived needs, medical services available, health knowledge and attitudes toward clinic utilization by the Sea Island people of South Carolina.

This study involved 364 adults on the five Sea Islands of South Carolina to determine their health knowledge, needs, and attitudes toward utilization of medical facilities now available on these islands.

Modifications and consultations for an appropriate instrument were completed in March 1975 and the survey instrument was assumed to be appropriate by twelve male jurors in medical and health-related fields.

An accepted sample size was determined by using Morgan and Krejcie's Small Sample Size for Research Activities Technique.

Using the Sea Island Comprehensive Health Care Primary Health Assistants daily outreach activity tract, each island was subdivided

into five zones. The administration of the instrument was carried out by fourteen members of the study team and the researcher himself.

Upon receipt of the completed questionnaires, the raw data were key punched on computer cards and verified for accuracy at the Medical University of South Carolina Computer Center. Frequency histograms and percentages were calculated for responses on all questions. Appropriate chi-square tests were run with the two-way tables to determine if there is a significant difference at the .05 probability level.

II. FINDINGS

The following categorical breakdown indicates the utilization of medical facilities, health knowledge, needs, attitudes, and major findings.

1. Of the sample population, 63.1 percent were having trouble with their eyes, 47.9 percent were having trouble with their teeth, and 32.7 percent had difficulties in hearing.

2. As many as 20.9 percent went to chiropractors; 0.8 percent went to root doctors; and 0.3 percent went to witch doctors. As many as 2.2 percent believed in the spiritual healing of Reverend Ike.

3. The Blacks on these Islands demonstrated more concern for preventive measures against diseases and illnesses than Whites. Ninety-two and two-tenths percent of the Blacks favored medical examination as compared with 18.9 percent of the Whites, 87.8 percent of the Blacks favored dental visits as compared to 23.6 percent of the Whites. Ninety and nine-tenths percent of the Blacks favored medical insurance as compared with 27.4 percent of the Whites.

4. The majority of the subjects believed that medicine over the last five years had improved chances for good health and longevity, but were concerned about the high costs for treatment and care. Seventy-two percent favored some type of insurance to cover their medical expenses.

5. The subjects did not generally take the proper preventive measures to protect their health.

6. Radio and television programs dealing with health or medicine were not reaching the people; 36.5 percent had never heard or seen any program at all.

7. Thirty-nine and three-tenths percent of the subjects expected the economy of the area to remain the same, and 43.2 percent viewed the family income to remain the same.

8. Eighty and two-tenths of the subjects realized that cancer, diabetes, and high blood pressure are not contagious. However, their knowledge of disease symptoms was quite low.

9. Sixty-three and one-tenth percent of the subjects said they had trouble with their eyes; 47.9 percent had trouble with their teeth, and 32.7 percent had difficulties in hearing.

10. Forty-eight and nine-tenths percent of the subjects indicated that they did not eat well when they sat down at the table to eat.

11. Clinics did not provide the health information that was needed by the residents. A large percentage of the people relied on "hearsay" for very limited information about health and sickness.

III. RECOMMENDATIONS

Based on the findings of this study, the following recommendations were made:

1. Communications between the patients and the physicians need to be improved. Physicians should explain to the people why frequent home visits were not possible in the existing health care delivery system.

2. At the time of this study, Sea Island Comprehensive Health Care Corporation was the primary provider of patient care. Family Health Center (County Health Department) was providing some care. These two should become a base for health care delivery since they served the majority of the people on the Sea Islands. This health care delivery should include a full range of services, including prevention of diseases and accidents, nutrition, environmental health, sanitation, and mental health. These programs and activities should be preventive in nature and should be designed to keep people well.

3. The project director of the Sea Island Comprehensive Health Care Corporation should coordinate and expand the existing fragmented activities and he should develop a meaningful evaluation.

4. Mass media, specifically newspapers and magazines, should be used as an incidental method to educate the people. The educational level of the sample was low and the people obviously did not read about health to any extent. Therefore, encounters by qualified health educators are needed to bring about a change in behavior.

5. Research should be undertaken to determine the best method to change the population's poor health habits and poor behavior patterns.

6. A massive public relations campaign should be undertaken by the Sea Island Comprehensive Health Care Corporation to convince the people that insufficient money is not a barrier to the people who need care and treatment.

7. Sea Island Comprehensive Health Care Corporation should expand the outreach program using existing personnel and resources as fully and as effectively as possible.

8. A health education committee should be formed. This committee should advise, plan, and implement programs for patient, employee, and community groups. The health education committee should be composed of representatives of the community, four members of the nursing service, administration, social services, two physicians, and eight Primary Health Assistants.

9. A well-trained and qualified health educator should be retained as a consultant to the committee. The committee should work closely with national, state, and local organizations to develop programs as First Aid and Disaster Education; Community Health, Nutrition and other Community Health problems.

10. Future research should be undertaken to determine the best method to change the populations' poor health habits and poor

behavioral patterns. At the same time research methods should be continually devised and utilized to evaluate the existing services.

CHAPTER VI

DISCUSSION AND OUTLINE OF A HEALTH EDUCATION PROGRAM FOR THE RESIDENTS OF SEA ISLANDS

This chapter discusses briefly the importance of health education, suggests a health education program, and outlines a program for the five Sea Islands of South Carolina.

The statistical analysis in Chapter IV of this study pointed to the fact that health education and/or health information should be an integral part of any comprehensive health care delivery system. It is obvious that personal and community health education are fundamental to any public health services.

It has been noted that public demand for medical care is growing and showing evidence of acceleration with increasing confidence in modern medicine, advancing level of education, and rising expectations of life with diminished tolerance of pain and disability. The cultural determinants of health care systems are complex and ramifying. Religious traditions, public understanding, and types and level of education are clearly of great importance.

In the past, need for health services, in the sense of the pool of ill health in the community, has often been seen as the sole and absolute determinant of what has to be provided. This researcher found skepticism concerning the capacity to measure need in that ultimate sense and also of whether the concept of need can be immediately helpful.

At a period when the cost of health care began rising astronomically and the public increasingly began to question the relationship between additional medical expenditures and any demonstrable improvement in health status, interest has grown in the potential for health education.

A few million dollars could be spent to teach the consumer-patient to develop a life-style conducive to good health and when chronically ill, to understand and cope more effectively with his own health problems. This could turn out to be far more effective than billions spent on the development of new medical technology and expensive inpatient programs.

The problems of translating consumer-patient information into behavior modification is a well-known obstacle to effective health education and has been used by many as an excuse for inaction. The examination of the requirements for human health and of the medical task suggests that the traditional concept and approach are inadequate.

This approach has exaggerated the contribution of the diagnosis and treatment of disease; it leads to a relative neglect of patients' involvement in their treatments, and patients' health education and/or information. Above all, it overrides the importance of measures directed to individuals rather than the population and the importance of preventive medicine.

I. PROGRAM OBJECTIVES

It is apparent from the findings that there were major significant themes which were relevant to this study. These themes were not specifically oriented to a given disease, but were related to conditions associated with the patients' environment, culture, beliefs, and health practices. The concept of this program, therefore, was to encourage the people on the five Sea Islands to become responsible for their own health by clinical skills and understanding of health problems and hazards.

The objectives of the program should be to:

1. Make available to the community adequate, useful, reliable information regarding health hazards.

2. Design curricula and educational materials which are relevant to the needs of patient-physician and patient-nurse relations.

3. Give Sea Island residents a better understanding of self-help and preventive medicine.

4. Train the subjects to do certain easy procedures and to make better observations of clinical events in minor illnesses.

5. Educate individuals who are or have been patients to cope more effectively with their health problems and to help the doctors achieve more effective management of their patients.

6. Prepare multidisciplinary health professional teams to act as health-education and health-information resources for the Sea Island community.

II. PROGRAM

Programs must be developed through a process that catalyzes community interaction and community resources to solve community problems. This interpretation emphasizes the importance of measures directed to populations (food and environmental control); among personal measures, it suggests the need for increased concern for patients' health knowledge and health needs; and among therapeutic services, it underlines the significance of utilization of medical facilities and care of terminal illness.

This program should be carried out through the joint efforts of the schools, health agencies, and the hospitals. The content of the program should be based on the community's health education needs.

The involvement and commitment of individuals, organizations, and institutions which will engage in the activities is essential. The opportunity for wider acceptance of decisions is improved and implementation of decisions will be achieved more rapidly.

III. PROGRAM CONTENT

Health care problems today are reaching such a complexity in nature they can no longer be solved by individuals working alone. Part of this complexity is due to the existing state of medical technology. Part is due to the increasing importance of social problems as they relate to this technology. To meet this complexity, emphasis should be placed on health education and/or information.

Health education is primarily preventive medicine. Beyond the prevention of diseases and the understanding of health problems, it is a positive design to raise levels of well being. Residents should be encouraged to develop understanding of the interdependent relationships with their environment. They should be given information about their health and how to protect it.

Educational activities should include a weekly class for diabetic patients and postnatal instructions for both parents. At the local high school, the clinic staff should devote three days a week discussing drug abuse, venereal diseases, and family life with the students; and two days a week for patients with sickle cell anemia following the screening program for the disease. For those in need of emergency counseling, arrangements should be made for a VD and drug-abuse-information "hot line."

The hospitals should conduct emergency childbirth and cardiopulmonary resuscitation classes for the community first-aid volunteers; and inservice training program for the Sea Island Comprehensive Health Care Corporation's Primary Health Assistants to enable them to carry on patient education.

The Primary Health Assistants (PHA's) should be trained to carry out a variety of duties. They might serve as receptionists, make interagency referrals, escort clients to other agencies, and act as true advocates and intercederers for clients who are unable to find their way through the maze of community agencies.

The social service workers should serve as a link between client and community resources. They should establish contacts with these

resources, hear complaints from patients, and investigate them. They should provide information to agency professionals about available resources and facilitate disposition.

A full-time public relations officer should be appointed who could assist students, motivate teachers, and help in the problem-solving processes of the community, and tutor and expand people's understanding of their individual personal health responsibilities. He should help the school faculty understand the community and its problems. He should serve as a bridge between the community and the agency, and act as referral agent and advocate. Academically and socially adjusted senior high school students from the same catchment area could assist this specialist in student activities.

Physicians and dieticians should design a program for nurses, to include causes and treatment for diabetes, the importance of diet, instruction on insulin usage and how to adjust dosage, urine testing, and personal hygiene. The aim of this program would be to provide a central core of information concerning diabetes. Classroom instruction should be supplemented with individual tutoring by doctors, nurses, dieticians, and volunteers.

The role of physician assistants as paraprofessionals has become rapidly and widely accepted in a broad spectrum of health services and deliveries. They should act as the professional outreach of the entire family care group visiting homes and schools. In addition, they should cooperate with the social workers in alerting all members of the family care group to nonmedical problems as they develop. Thus they will provide the Sea Island Comprehensive Health Care Corporation with an

awareness that enables the physicians to provide health care in the context of the family's total environment.

Nonmedical members of the clinics must help with socioeconomic problems that arise in the family units, and do some counseling in alcohol and drug problems. Smaller hospitals with no previous experience in community health education may be advised to work with the health centers. The resources of the numerous public and private agencies, local, county, and state, should be explored.

IV. ORGANIZATION AND SUPERVISION OF THE PROGRAM

The project director of the Sea Island Comprehensive Health Care Corporation should coordinate and expand the existing fragmented activities and develop a meaningful method of evaluating the same. An advisory group should be formed. This should include representatives from the hospitals, the community, schools, and health agencies who will prioritize the needs of the community to existing clinic or hospital resources.

The protection and promotion of health education and information has moved beyond the control of the individual. The suggested program will develop people's understanding of the interdependent relationships among individuals, groups, and community for mutual protection. It will present facts in a manner designed to develop appreciation for the benefits of a sound health program, knowledge, and skills concerning environmental sanitation and its relationships to individuals.

Beyond the prevention of diseases and the understanding of health problems, this program is a positive design to raise levels of well-being

and liberate man's potential. Courses must be designed to actively involve the adult learner in the learning process, and must take into consideration the need for maximum freedom and flexibility. A community health education program must, by its very nature, include the important issues of educational methodology and should make room for adult learning.

Staffing is crucial. The instructional program should be administered by a community health educator/coordinator. The ideal community health educator/coordinator is one who combines a background in health professions with some knowledge of modern educational techniques; strong qualities in program development with flexibility in implementation. It is suggested that this be a health educator with an advanced degree. General policies should be determined by an advisory committee consisting of physicians, nurses, PHA's, four members of the community center and the project administrator.

The program should be evaluated according to its effectiveness in improving the status of the residents' health. Without some form of evaluation, the program might drift along at the whims of the clinic staffs. This pilot program could contribute substantially to the experience necessary for the development of better health care delivery. Participants will become more aware of their health needs and the health care deliverers will come to understand these needs more fully. For the physician, in particular, community education of this sort adds yet another dimension to their art of medicine.

CHAPTER VII

IMPLICATIONS

The financial cost of medical care has been considered to affect the utilization of health services. Other factors such as economic status of the Sea Island residents could also determine the degree of their health care expenditures. Most of the people on these islands are poor with large families; jobs in this area are seasonal in nature; the underemployment or unemployment rate is high, and the majority of the workers earned less than $2,000 per annum as of September 1974.

The Rural Mission, Incorporated, first made health care facilities available to the Sea Island residents in 1970. At the time of this study, two Neighborhood Health Centers were available for the residents. The findings of the study clearly indicate an inadequacy in health education and/or information. This calls for the development of an effective health education program in collaboration with the delivery of health services.

It is obvious from the data collected, that nutrition, community, and dental health education are fundamental in the improvement of the health status of this population. It is important for all individuals to have information and facts on health so that they may apply these facts to their own living and to that of their dependents.

Skillfully developed and properly presented, a community health program will become a powerful force in improving the health of the

population and contribute to the development of positive health attitudes. Its ultimate goal, therefore, would be to encourage and assist the residents in taking individual and group actions to protect and improve their own health.

The problems of translating or transferring health information into health behavior modification are well established facts. This has been used by many as an excuse for inaction. It is not enough to simply present information; what counts is whether and how this knowledge is applied. Furthermore, it has been realized that the community is an organized structure and that a coordinated health education program is needed. A program of this type will reach each segment of the community according to its nature and needs.

Instead of receiving a national barrage of information from remote agencies, a community-based program has a chance of success because people within the community will spread the information; and since they are part of the program, they will be concerned about the application of good health practices.

Programs must be developed in the community setting so as to be viable and have growth potential. The process will utilize existing resources in the community, maximizing the abilities of the concerned individual.

The information learned in a typical setting might not directly be applicable to the participant's health problems. This will help the community to develop new ways for solving their problems through

provision of educational opportunities, consultations, and technical assistance.

All these add up to an educational process. People must be trained to provide help for their family members, peers, and neighbors. As awareness and knowledge grow in an increasing number of people, there will be pressures to bring about institutional change that will be more responsive to the needs of those the program serves.

The researcher's preliminary conclusion is that enough success will be achieved with this community-based program to warrant establishment of similar community-oriented health education programs in other parts of the nation with similar problems and needs.

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APPENDIXES.

APPENDIX A

LETTER OF REQUEST AND PERMISSION

TO USE INSTRUMENT

Post Office Box 201
Hollywood, S. C. 29449
January 14, 1975

Dr. Bill Carlton
8921 Moneymaker Drive
Knoxville, Tennessee 37921

Dear Dr. Carlton:

The result of my comprehensive examination of November 1974 justified my ability as a potential doctoral candidate; in other words, I was successful.

The proposal for my study had been duly accepted and I am now searching for an appropriate instrument to collect the data. The instrument you used for the Kentucky study seems to be appropriate for my study with some modifications.

I am hereby asking for your permission to modify and use this instrument for my proposed study. I have enclosed an addressed and stamped envelope to facilitate your immediate action.

Best wishes to all members of your family.

Sincerely yours,

A. F. A. Folawiyo

Enclosure

8921 Moneymaker Drive
Knoxville, Tn. 37921
January 28, 1975

Mr. Abdul Folawiyo
P. O. Box 201
Hollywood, South Carolina 29449

Dear Abdul:

I received your letter in which you requested the use of my survey instrument for your dissertation.

You may use the instrument and modify it to meet the need of your population. However, I would like credit in your footnotes for developing the instrument.

Good luck. I'm sorry that we did not get to talk more in detail about your study when you visited UT several months ago. If I can help you in any way, please contact me.

Sincerely yours,

Bill Carlton

cc: Dr. Bill Wallace

APPENDIX B

LIST OF JURORS

Dr. Leroy F. Anderson, Ed.D., Project Director
Franklin C. Fetter Family Health Center
417 Meeting Street
Charleston, South Carolina 29401

Dr. E. Kenneth Aycock, M.D., M.P.H.
State Commissioner of Health
J. Marion Sims Building
2600 Bull Street
Columbia, South Carolina 29201

Dr. J. Carroll Chambers, M.D., M.P.H.
Associate Director
Charleston County Health Department
334 Calhoun Street
Charleston, South Carolina 29401

Dr. Hiram B. Curry, M.D., Chairman
Department of Family Practice
Medical University of South Carolina
Charleston, South Carolina 29403

Dr. Harold Elliot, M.D., Assistant Medical Director
Sea Island Comprehensive Health Care Corporation
Route 3, Box 308-A
John's Island, South Carolina 29455

Dr. Daniel W. Ellis, M.D., Chairman
Department of Clinical Pathology
Medical University of South Carolina
Charleston, South Carolina 29403

Dr. Cecil Jacobs, M.D., M.P.H., Director
Charleston County Health Department
334 Calhoun Street
Charleston, South Carolina 29401

Dr. E. Noble, M.D., Medical Director
Sea Island Comprehensive Health Care Corporation
Route 3, Box 308-A
John's Island, South Carolina 29455

Dr. Robert Nored, E.D., Director
Physical, Health and Safety Education Department
Charleston County School District
Charleston, South Carolina 29401

Dr. Porfirio Rodriguez, M.D.
Esau Jenkins Memorial Health Center
P. O. Box 5155
Hollywood, South Carolina 29449

Dr. Joseph C. Ross, M.D., Chairman
Department of Medicine
Medical University of South Carolina
Charleston, South Carolina 29403

Dr. Annie Thomas, M.D.
Esau Jenkins Memorial Health Center
P. O. Box 5155
Hollywood, South Carolina 29449

APPENDIX C

SURVEY QUESTIONNAIRE

SURVEY QUESTIONNAIRE

I.D. Number:

Sheet No. Island No. Social Worker No.

Direction: Please respond by putting the appropriate number in the indicated box or boxes.

1. What is your age (to the nearest year)?

2. Race?

1 = White
2 = Black
3 = Others

3. Sex?

1 = Male
2 = Female

4. What is your marital status:

1 = Married
2 = Single
3 = Divorced
4 = Widowed

5. If married, does your spouse live in this household?

1 = Yes
2 = No

6. How many childred under 18 years of age live in this household?

7. How many children over 18 years of age live in this household?

8. Total living in household including respondent?

[ ][ ]

9. Education level:

[ ]

1 = Never attended school
2 = 6th grade or under
3 = Attended junior high
4 = Attended high school
5 = Attended college

10. How long have you lived on this Island?

[ ]

1 = Less than 1 year
2 = 1-5 years
3 = 6-10 years
4 = 11 or more

11. Do you go to any of the following health centers:

1 = Esau Jenkins Clinic
2 = John's Island Clinic
3 = Family Health Clinic (County Health Dept.)
4 = Hollywood Clinic

[ ]

12. If yes, how would you rate them on:

[ ]	A. Clinics	1 = Excellent
[ ]	B. Doctor's service	2 = Good
[ ]	C. Dental services	3 = Fair
[ ]	D. Transportation services	4 = Poor
[ ]	E. The appointment clerks	
[ ]	F. The nurses	
[ ]	G. The PHA's (Primary Health Asst.)	

13. How much trouble would you have getting a doctor to come to your home at night or on a Sunday?

[ ]

1 = A whole lot
2 = A little
3 = No trouble at all
4 = Don't know

14. If a person is feeling all right, do you think he should get a general medical examination every year?

[ ]

1 = Get exam every year or so
2 = Not worth the trouble

15. Total physician contacts within last 12 months:

☐

1 = None
2 = 1-5 times
3 = 6-10 times
4 = 11-15 times
5 = 16 times or more

16. Have you or anyone else living in this household received medical care from anyone who is not a regular doctor?

☐

1 = Yes
2 = No

17. Where did you receive the medical care?

☐

1 = Chiropractors
2 = Witch doctors
3 = Root doctors
4 = Rev. Ike

18. Do you think a person should make a practice of seeing the dentist regularly, every 6 months or year, even if his teeth are all right, or is it worth the trouble unless you have a complaint?

☐

1 = See dentist regularly
2 = Not worth trouble

19. Suppose you could get some kind of insurance that would cover all the medical and dental expenses you and your family might have in the future so that you would not have to worry about costs. Does such insurance seem like a good idea for your own family or are you as well off without it?

☐

1 = Good idea
2 = As well off without it

20. How often do you read the health column in newspapers?

☐

1 = Most all of the time
2 = Every now and then
3 = Hardly ever
4 = Never

21. How often do you listen to radio and television programs dealing with health or medicine?

☐

1 = A whole lot
2 = Every now and then
3 = Hardly ever
4 = Never

22. During the next couple of years, what do you think will be the financial condition of people on these Islands?

[ ]

1 = Better off
2 = About the same
3 = Worse off

23. How about yourself and your family, what will be your financial conditions?

[ ]

1 = Better off
2 = About the same
3 = Worse off

24. Are these symptoms of CANCER?

A. Any lump, especially in the breast, lip or tongue. [ ]
B. Loss of appetite or continual indigestion. [ ]
C. Any irregular or unexplained bleeding. [ ]
D. Stomach pains. [ ]
E. Failing vision. [ ]
F. Frequent urination (passing water). [ ]

1 = Yes
2 = No

25. Are these symptoms of sugar DIABETES?

A. Losing weight [ ]
B. Backache, lower part of back. [ ]
C. Itching. [ ]
D. Shortness of breath. [ ]
E. Slow healing of infections. [ ]
F. Loss of memory. [ ]

1 = Yes
2 = No

26. Are these symptoms of HIGH BLOOD PRESSURE?

A. Headaches in the back of the head. [ ]
B. Frequent urination. [ ]
C. Extreme thirst. [ ]
D. Dizziness. [ ]
E. Hunger. [ ]
F. Shortness of breath. [ ]

1 = Yes
2 = No

27. Do you think it is possible to catch any of the following illnesses from someone else?

A. CANCER [ ]

B. DIABETES [ ]

C. BLOOD PRESSURE [ ]

I am going to read you a list of conditions and I would like you to tell me if you have them or anyone in your household.

1 = Yes 2 = No

28.	Do you have trouble with your eyes?	
29.	Do you have trouble with your hearing?	
30.	Do you have any bad teeth?	
31.	Do you often have bad headaches?	
32.	Do you ever have a pain in the chest?	
33.	Do you suffer from indigestion?	
34.	Have you lost a lot of weight lately, without dieting?	
35.	Have you had any trouble with urination (passing water)?	
36.	Do you have trouble sleeping?	
37.	Do you eat good when you sit down at the table?	

APPENDIX D

TABLES

TABLE 43

OEO ELIGIBILITY POPULATION DISTRIBUTION,
YONGES ISLAND

AGE	Total Population		Estimated OEO Eligible	
	MALE	FEMALE	MALE	FEMALE
0-2	225	330	179	211
3-4	260	270	183	190
5-9	430	440	308	309
10-14	1050	1075	738	330
15-19	572	574	517	494
20-24	198	369	179	323
25-34	432	460	390	315
35-44	372	502	337	454
45-54	420	466	379	421
55-59	188	196	170	177
60-64	158	167	143	151
65 & Over	247	373	223	337
TOTAL	4552	5192	3746	3712

1970 Census Report.

TABLE 44

OEO ELIGIBILITY POPULATION DISTRIBUTION,
EDISTO ISLAND

AGE	Total Population		Estimated OEO Eligible	
	MALE	FEMALE	MALE	FEMALE
0-2	58	46	56	45
3-4	41	37	40	36
5-9	105	98	102	95
10-14	160	143	136	140
15-19	108	94	105	92
20-24	42	45	41	44
25-34	37	45	36	44
35-44	52	70	51	68
45-54	63	73	61	71
55-59	33	35	32	34
60-64	21	35	20	34
65 & Over	53	70	52	68
TOTAL	773	791	732	771

1970 Census Report.

TABLE 45

OEO ELIGIBILITY POPULATION DISTRIBUTION,
JAMES ISLAND

AGE	Total Population		Estimated OEO Eligible	
	MALE	FEMALE	MALE	FEMALE
0-2	681	804	211	249
3-4	708	672	219	201
5-9	1221	1615	379	377
10-14	2475	2379	767	737
15-19	1138	1149	353	356
20-24	683	918	212	285
25-34	1759	2150	545	667
35-44	1467	1567	355	486
45-54	1241	1262	385	391
55-59	426	453	132	140
60-64	271	341	83	105
65 & Over	455	619	141	191
TOTAL	12,526	13,929	3782	4185

1970 Census Report.

TABLE 46

OEO ELIGIBILITY POPULATION DISTRIBUTION,
JOHN'S ISLAND

AGE	Total Population		Estimated OEO Eligible	
	MALE	FEMALE	MALE	FEMALE
0-2	227	268	181	224
3-4	236	224	188	179
5-9	407	405	326	313
10-14	825	793	658	633
15-19	447	438	357	350
20-24	246	289	196	231
25-34	454	446	363	356
35-44	380	400	303	320
45-54	350	381	280	303
55-59	138	135	110	108
60-64	100	111	80	89
65 & Over	171	234	136	187
TOTAL	3981	4124	3178	3293

1970 Census Report.

TABLE 47

OEO ELIGIBILITY POPULATION DISTRIBUTION,
WADMALAW ISLAND

AGE	Total Population		Estimated OEO Eligible	
	MALE	FEMALE	MALE	FEMALE
0-2	69	56	68	55
3-4	51	48	50	47
5-9	208	161	203	159
10-14	261	243	259	240
15-19	135	133	133	131
20-24	53	64	52	63
25-34	84	109	83	108
35-44	71	87	70	86
45-54	81	125	80	123
55-59	57	52	56	51
60-64	33	36	31	35
65 & Over	61	77	60	76
TOTAL	1164	1191	1145	1174

1970 Census Report.

TABLE 48

FAMILY UNITS ON THE FIVE SEA ISLANDS

Family	John's Island	Wadmalaw Island	James Island	Yonges Island	Edisto Island	Total	Average
With children under 18	1127	263	4061	1299	114	6864	1372.8
Number of persons in household	4.0	4.2	3.5	4.2	4.18	19.27	3.85
Female head of household	218	71	613	366	76	1344	268.80
Female 14 years & over	2534	696	8462	3145	511	15348	3070

Rural Mission, Inc., 1971.

TABLE 49

EDUCATION AND PSYCHOLOGICAL MEASUREMENT 1970

Table for Determining Sample Size for Research Activities

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

See Reference 49.

APPENDIX E

SURVEY TEAM

1.	Mary Banks	Yonges Island
2.	Anna Ancrum	Meggett, S. C.
3.	Jacki Whaley	James Island
4.	Ethel A. Dunmeyer	Yonges Island
5.	Norma Walker	James Island
6.	Virginia Mungin	Yonges Island
7.	Eleanor Swinton	Meggett, S. C.
8.	Lottie Singleton	John's Island
9.	Ethel Gourdine	James Island
10.	Betty Washington	Charleston
11.	Philip Simmons	Ravenel, S. C.
12.	Betty Green	Ravenel, S. C.
13.	Josephine Richardson	James Island
14.	Cathy Walker	James Island

APPENDIX F

LETTERS TO AND FROM JURORS

Post Office Box 201
Hollywood, South Carolina
February 11, 1975

Dear Dr. _____:

I want to express my gratitudes for your constructive criticisms of the instrument I sent to you last year. The comments provoked a further search for a better instrument.

I am still shopping for an instrument, and this is a modification of a similar study made in Kentucky sometime ago.

I will be happy if you can let me have your comments. More still, I want for you to rate each item from 1-5, five being the most favorable rating.

I have enclosed a rating sheet; stamped and addressed envelope, and I will be happy if I can have these back on or before February 24, 1975.

Sincerely yours,

A. F. A. Folawiyo

jm
Enclosures

SEA ISLAND COMPREHENSIVE HEALTH CARE CORPORATION

John's Island Health Center, Route 3, Box 308-A,
John's Island, S.C. 29455 Telephone (803) 559-5500
Esau Jenkins Memorial Health Center, P.O. Box 5155,
Hollywood, S.C. 29494 Telephone (803) 889-2272

February 24, 1975

Mr. A. F. A. Folawiyo
Post Office Box 201
Hollywood, S.C. 29449

Dear Mr. Folawiyo:

First, I would like to tell you that the instrument you made this time is more comprehensive and detailed.

You have covered a lot including health education from Medical, Dental, Environmental and Educational standpoint.

I have enclosed your rating sheet which I think commensurate to your work.

Sincerely yours,

P. Rodriguez, M.D.

es
Enc.

SEA ISLAND COMPREHENSIVE HEALTH CARE CORPORATION

John's Island Health Center, Route 3, Box 308-A,
John's Island, S.C. 29455 Telephone (803) 559-5500
Esau Jenkins Memorial Health Center, P.O. Box 5155,
Hollywood, S.C. 29494 Telephone (803) 889-2272

February 24, 1975

Mr. A. F. A. Folawiyo
Post Office Box 201
Hollywood, S.C. 29449

Dear Mr. Folawiyo:

I studied with great interest the second questionnaire you presented to me for evaluation. In my opinion this one is more complete as it deals with all aspects of the life of the people on the five islands.

I especially recommend the attempts (in questions 45 through 49) to find out the effectiveness of media for health education. To my knowledge this is the most forgotten field when we make plans to improve the health care of the island population.

Also the questions 50 and 51 dealing with the people's outlook about their future are also very valuable.

Once again thanking you for giving me this opportunity.

Wishing you continued success.

Sincerely,

Annie Thomas, M.D.

es

CHARLESTON COUNTY HEALTH DEPARTMENT
334 Calhoun Street
Charleston, South Carolina 29401

December 16, 1974

Mr. A. F. A. Folawiyo
P. O. Box 201
Hollywood, S.C. 29449

Dear Mr. Folawiyo:

It would be difficult for me to criticize the questionnaire which you plan to use for surveying various aspects of life of the people residing on the sea islands. It seems complete in every respect. I am assuming that you will administer this instrument in person, since, some of the questions may lend themselves to mis-interpretation.

With kindest personal regards, I remain

Sincerely,

J. Carroll Chambers, M.D., M.P.H.
Associate Director

JCC:mjw

SEA ISLAND COMPREHENSIVE HEALTH CARE CORPORATION

John's Island Health Center, Route 3, Box 308-A,
John's Island, S.C. 29455 Telephone (803) 559-5500
Esau Jenkins Memorial Health Center, P.O. Box 5155,
Hollywood, S.C. 29494 Telephone (803) 889-2272

March 10, 1975

Mr. Abdul Folawiyo
Post Office Box 201
Hollywood, South Carolina 29449

Dear Mr. Folawiyo:

I have received your most recently submitted questionnaire and find it quite adequate for the intended purpose.

Assistance should be given to illiterate person, of course. There is always room for error, introduced by the respondents desire to say what the questioner likes. That could be avoided by introducing some negative questions. Assessment of patient attitudes is always difficult and subject to interpretation, based on local circumstances.

On the whole, the instrument is well conceived.

Sincerely,

H. J. Elliott Md.

VITA

Abdul Fattah Adio Folawiyo was born in Lagos, Nigeria, on August 8, 1937. He attended Talmul Islam Ahmadiyya Elementary School, Elegbata, and Christ High School, Ilubinrin, Lagos. In 1955 he proceeded to Ansar-ud-deen Teacher Training College Otta, where he received Teachers' Grade III Certificate in 1957 and Grade II Certificate in 1961. He attended Ahmadu Bello University where he received Diploma in Physical Education in June 1965.

His work experiences include teaching. He was a headmaster (principal) of elementary schools; field and track coach; soccer coach and player. He taught health and safety education in the public high schools in Charleston County, South Carolina. In June 1974 he was appointed by Sea Island Comprehensive Health Care Corporation as Clinic Coordinator and he was promoted to the position of Consultant in Public Health in April 1975. He received a good number of gold and silver medals; and trophies and certificates which he won during intercollegiates, national, and international track and field competitions. He has traveled extensively all over the world.

He came to the United States of America in September 1967 for further studies. He received the B.S. degree in physical education in 1969; and the M.S. degree in physical health and safety education in 1970 from Indiana State University, Terre Haute, Indiana.

He started his doctoral program in the summer of 1972. He was awarded a teaching assistantship by the University of Tennessee in 1973

and received the Doctor of Education degree with a major in health education and a collateral in educational administration and supervision in December 1975.

He is a member of Omega Psi Phi Fraternity, Kappa Delta Pi, Phi Delta Kappa—honor societies in education. He is a member of the Rosicrucian Lodge; a member of NAACP: American Red Cross, Boy Scouts of America (Leader); Boy Scouts of Nigeria (Scoutmaster); South Carolina Public Health Association, and American Alliance for Health, Physical Education, and Recreation (AAHPER).