12-1978

Improved Public Health Practices in a Disadvantaged Rural Community

William H. Groff
University of Connecticut - Storrs

Beatrice E. Manning
University of Connecticut - Storrs

Bulletin 451, December 1978

26

Improved Public Health Practices in a Disadvantaged Rural Community

By William H. Groff and Beatrice E. Manning
Department of Agricultural Economics and Rural Sociology

STORRS AGRICULTURAL EXPERIMENT STATION
COLLEGE OF AGRICULTURE AND NATURAL RESOURCES
THE UNIVERSITY OF CONNECTICUT, STORRS, CONNECTICUT 06268

TABLE OF CONTENTS

The research reported in this publication was supported in part by Federal funds made available through the provisions of the Title V, Rural Development Act.

Received for publication August 31, 1978.

IMPROVED PUBLIC HEALTH PRACTICES IN A DISADVANTAGED RURAL COMMUNITY

By William H. Groff and Beatrice E. Manning*

INTRODUCTION

This report provides an overview of Connecticut's project funded largely by funds made available under Title V of the Rural Development Act of 1972.[1/] The Rural Development Act of 1972 was signed into law by the President on August 10, 1973 and funding became available in 1974. The Act, which contains six titles, was designed to facilitate the development of rural communities. Title V of this act provided funds and guidelines for coordinated educational, extension and research programs designed to have high impact within the three years authorized by the Act. Title V's purpose was to encourage pilot projects combining innovative research and educational personnel in order to foster and enhance a more balanced development in rural areas. Each state was free to set up and test community development programs of its choice.

In Connecticut an Ad Hoc Committee of researchers, extension specialists and other interested persons considered several possibilities before choosing to focus upon health needs and practices in the ten towns which comprise the Northeastern Connecticut Planning Region.[2/] The Northeastern Planning Region, the selected target area, has a population of approximately 62,000 persons and has a relatively high rate of unemployment, low wages, poverty and low educational attainment. It is one of the least recognized regions in the state and has only recently moved in the direction of land use planning and improved socio-economic programs.

In 1973, the region was granted status as a health district and was showing both interest and concern over health delivery in the area despite its financial situation. The Ad Hoc Committee selected this region as the target area for its proposal since it was felt that the Committee's activities could help to keep interest alive and provide assistance in the development of new and/or expanded health programs in the area.

The Ad Hoc Committee developed a proposal and plan of work according to the guidelines established for the Title V project which were approved. The Committee was concerned that any activities under its

*Associate Professor and Project Researcher in Rural Sociology, The University of Connecticut, Storrs, Connecticut.

auspices could be completed or absorbed into the community system during the three years authorized in the Act. The basic goals of the project were:

1. to contribute to improved health of residents in the target area,

2. to appraise the feasibility of new health programs proposed by health providers and consumers

3. to test a general community development model.

The Committee's proposal was intended to be flexible enough to respond to the changing needs in the community and to coordinate its efforts with community health agencies and others.

During the first six months of the project, a generalist in community development was employed to introduce the project to health agencies and health providers, assemble pertinent data and assist in bringing specificity to the project goals. During this period, key informants expressed a need for increased primary care. This led to an ambitious objective of establishing a pilot primary health care clinic, staffed by a nurse practitioner, under the supervision of a physician. Although this part of the project was abandoned because it did not seem feasible at the time, a primary care clinic was opened late in 1977. The continued interest of project personnel in providing health services to the region may have helped by keeping interest alive.

In November 1974 the community development generalist was replaced by 1) an experienced Public Health Nurse who was also trained as a nurse practitioner and, 2) a research sociologist.3/ Their educational research and service work during the succeeding 18 months were a major factor in the success of the project. The Committee which developed the proposal served primarily as a sounding board and a source of assistance but the major activities were developed and implemented by the research sociologist and the Public Health Nurse. Due to the resignation of the nurse practitioner and the unexpected death of the research sociologist it was necessary to hire new personnel for these positions during the last year of the project. The successful continuation of the project during its last year was in part directly related to their capabilities in maintaining good working relationships in the community.

RESEARCH ON HEALTH PRACTICES AND NEEDS

Although Title V placed an emphasis on the coordination of education, extension and research the plan of work required separate concise statements describing specific extension and research projects. Funding and authority for the program was coordinated under the Smith Lever Act of 1914 (Extension) and amended Hatch Act (the Experiment Station). Thus, while research and extension focused on the basic

goals discussed, some more specific objectives were different. This report will primarily focus upon research activities and areas in which research and extension activities overlap. The basic objective of the research portion of the project was to respond to requests for information on data required by the nurse practitioner or other medical agencies in the region when feasible. More specific objectives were:

1. to analyze and relate the extent and use of personal health services,

2. to identify how providers and consumers perceive the adequacy of personal health services,

3. to measure response to educational efforts, implemented in area-wide programs and pilot projects directed toward improving personal health, and

4. to appraise the feasibility of alternative comprehensive health programs for the study area.

When the project hired a nurse practitioner and a research methodologist, the coordination between research and extension was less formal but continued on a more personal level. Two factors led to reduced cooperation. First, the two individuals hired were located at different offices, approximately 30 miles apart. The nurse practitioner was located in the region's Extension Office and interacted more directly with local agencies and individuals. The research methodologist was located at the University and interaction at the local level was reduced and often secondary through extension or other interested agencies. Second, the development of separate plans of work for extension and research led to a divergence of interests and time commitments. So while cooperation continued, these factors led to a reduction in formal contacts between the two workers.

An additional problem area was a result of experience and educational backgrounds of the research and extension personnel who formed the Advisory Committee for the two "field" workers. When the decision was made to postpone or exclude the development of a primary care public health clinic, and the emphasis shifted to identifying and responding to local initiatives, somewhat different approaches were introduced emphasizing preventive health programs. With this shift in emphasis, researchers decided to focus on several approaches for collecting and analyzing health priorities and needs which could prove useful to the region's health system while still responding to requests for assistance from the nurse practitioner and area representatives.

In short, with the increased flexibility of the nurse practitioner's role it became difficult to forecast data needs and develop evaluation procedures. This situation quite often occurs when research methodologists and change agents interact and attempt to coordinate activities. In this instance the problem was not serious because of the cooperation and communication existing between the personnel involved. This problem will be reviewed in more detail later in this paper.

During the first few months of their employment both the researcher and the nurse practitioner placed an emphasis on establishing relationships with community agencies and becoming acquainted with the area. During this period working together and/or separately the two identified several areas where health care improvement was needed. These included the need for health education programs, especially in the area of preventive health care practices; the need for dental care, particularly among young children; and the need for coordinated comprehensive services for senior citizens. Both field workers with the Visiting Nurses Association in the ten towns provided basic data which was used in the merger of four out of five associations in the area and assisted in the analysis of an annual health fair in Plainfield (one of the ten towns in the area). These represent areas in which there was a high degree of coordination by the field personnel. In addition to these programs, the researcher developed and implemented a modified Delphi mail questionnaire to identify citizens priorities on health care needs, completed a household survey of health care priorities and needs in a sample of households in the area and completed a study of the Emergency Service Department at the local hospital.

Health Status of Senior Citizens[4/]

One of the first areas of health needs and practices that concerned the field team was the status of elderly citizens of the region. On February 28, 1975, the researcher, the nurse practitioner and representatives from several area health agencies administered a brief questionnaire on health practices and needs to senior citizens at the Quinebaug Valley Senior Citizens Center in the town of Plainfield, Connecticut. Thus, the survey represented the coordinated effort of the Title V field team and a number of local health agencies and residents.

This survey did not represent a sample of the elderly in the town since the senior citizens who went to the Center may be more physically mobile, had some form of transportation available and were better informed of the services available for senior citizens.[5/] Although the survey was biased on these factors, it did contribute to a better understanding of health problems of senior citizens in several ways.

First, it provided general information on the health status of the elderly who went to the Center. Seventy-six percent of the respondents had at least one chronic health problem (high blood pressure was mentioned as a problem by 43 percent). Seventy-two percent of the respondents indicated regular use of medication. The results also indicated that although 89 percent of them had Medicare or some other form of medical assistance, the coverage generally did not cover many areas such as routine physical exams, eye and hearing exams and immunization, except when required by law.

The survey also contributed to a greater community concern over the health problems of the elderly. As a result, the nurse practitioner

assisted in the writing of a proposal to the area agency which led to the establishment of five preventive health clinics in the region and an elderly health screening program.[6]

Priorities for Health Care Delivery[7]

One of the basic problems in coordinating research and extension activities is the time span between collecting, analyzing and reporting the findings of research programs. In many instances, extension and others in the applied area must make decisions and implement programs before the findings from the research projects are available. Despite efforts to the contrary, this has also been the case with the Title V project. Both the research methodologist and the nurse practitioner were hired at approximately the same time and while there was good cooperation, it did not prove possible to meet the informational needs in research.

One of the objectives we had hoped to accomplish was to use three different methods of measuring the health practices and needs: 1) a random sample of households in the target area, 2) a shorter telephone survey, and 3) a modified Delphi technique to identify health priorities. The use of these three measures would have made it feasible for us to compare data collecting techniques, the differences in time required, and reliability of those techniques with the lowest turnaround time. The unexpected illness and death of the research sociologist caused us to give up the idea of a telephone survey and led to a delay in the analysis of the survey of households.

The Delphi technique is a fast and inexpensive way to get information from a cross section of individuals in the community. The Delphi technique was originally developed by Olaf Helmer as a methodological technique for forecasting the future in an orderly fashion.[8] Experts in a given area are asked to respond to a series of mailed questionnaires which through design lead to a relative consensus in forecasting future technological developments. This technique has also been applied in forecasting the future of health care organization.[9] We used a modification of the technique to identify major areas of health care concern of selected residences and established a priority of these concerns. The technique was also used to identify the alternatives for resolving these problems. A series of three mailed questionnaires were sent to four groups of people: medical personnel, community leaders in the health field, a sample of active low income residents and local pharmacists. The first questionnaire asked the respondents to identify major health problems in the target area. The second questionnaire asked the respondents to rank these responses in order of importance. The third questionnaire identified the priority of responses and asked respondents to indicate what they considered the "best" solution to the six highest ranked priorities. The results gave us a listing of health care problems and their priorities as seen by members of the community. Although the response rate was not as high as we had hoped, it was within the range of acceptability. Medical personnel, resident health leaders and pharmacists had much higher rates of return than low income persons.

The rank order of the six problems cited most often by the respondents and their priorities were lack of:

1) MD's (General Practitioners)
2) Medical Clinic(s)
3) Dental Clinic(s)
4) Preventive medicine for adults
5) Preventive medicine for children
6) Transportation to and from Health Services.

These categories are not mutually exclusive and many categories ranked lower in the priority list could be resolved through the resolution of the problems noted above. For example, health education which ranked ninth could be clearly associated with preventive medicine for children and adults. The priority given to primary health care (Items one and two) is not surprising. The high ranking of preventive health care (Items four and five) clearly points to an interest in educational programs, screenings, etc.. The local hospital ranked as the lowest problem, indicating that respondents were generally satisfied by the care offered at the hospital. On the other hand, the high cost of medical care was mentioned most often in the comments provided by those who responded to the third questionnaire.

In summary, the series of questionnaires did provide increasing consensus on the health care problems in the target area. Primary care facilities and preventive health were mentioned most often. Some respondents to the third questionnaire did express surprise that mental health, alcoholism and drug abuse were not placed higher on the priority list. The data from the Delphi study reflect the fact that this region has the lowest rate of primary care physicians per population in the state but this rate is significantly higher than rates in many rural areas throughout the country. The findings from the use of the Delphi technique suggest that it can provide an indication of community problems and their priority. Later in this report we will be able to compare these results with those taken from a survey of households in the region. It also will be pointed out that the technique was used as a means of generating continuing interest concerning health problems in the target area. The requests for copies of the report suggests that it also accomplished this purpose.

Plainfield Health Fair Survey[10/]

Plainville, one of the ten towns in the region, held a "Health Fair" on January 23, 1976. This Fair has been an annual event and is sponsored by the Visiting Nurses Association and other local agencies. The "Fair" provided information on medical services available, screening tests, etc.. Over 350 persons attended the Fair and both the nurse practitioner and the researcher assisted in implementing the Fair's activities. People attending the Fair were given the opportunity to respond to a brief questionnaire which contained questions related to the Fair as well as the opportunity to assess the health delivery system in the area. Fifty-nine people responded to the questionnaire. The majority

of the participants were young women and their children from the lower middle income group. Most (59 percent) evaluated the Fair as excellent and nobody considered it fair or poor. Comments made by the respondents indicated that they found the Fair contributed to their knowledge of health care and screening processes available. The largest criticisms of the Fair were related to increasing the services provided and publicizing the Fair more widely. The major health problems cited included the lack of family doctors in the area and the need for preventive health programs. The respondents expressed a strong sentiment toward solving the area's health problems through local efforts rather than imposed programs by the state or federal government.

Although the respondents interviewed did not represent the total population of the area, they clearly showed an interest in health problems and expressed the need for more preventive health and educational programs.

Emergency Room Utilization[11/]

In order to increase our understanding of the health care system, it was necessary to examine the role of the local hospital. As it was noted earlier in this report the hospital's services were viewed favorably by the respondents to the various questionnaires. This combined with the consistency of the various respondents in expressing a need for primary health care led us to look at the role of the hospital's Emergency Room. Recent studies have shown an increase in the use of Emergency Rooms as an important part of local health systems. With the full cooperation of the local hospital, we analyzed the use of the Emergency Room with an emphasis on its possible function in the primary health care system. Data for the analysis came from two types of records maintained by the Emergency Room and random samples of the patients were drawn for two time periods (January and June) in 1974. This procedure led to a total sample of 285 cases.

The primary purpose of the analysis was to attempt to determine the extent to which the Emergency Room was used for "primary care". "Primary care" was defined as health maintenance, including routine physical examinations, maintaining immunity levels, the diagnosis and treatment of various illnesses and injuries not considered life threatening and any follow-up treatments needed for these symptoms or injuries. Approximately half (50.4 percent) of the patient visits to the Emergency Room were classified as non-emergencies.

Although the data does not include information on the changing rate of use of the Emergency Room, this can be implied by recent increases in staff at the Emergency Room. A restudy which has recently been completed will provide an analysis of changes over time.

Briefly, approximately 35 percent of the Emergency Room use came on the weekends and approximately 45 percent between 8:00 a.m. and 4:00 p.m. Approximately 66 percent of the patients used the Emergency Room

for the first time. The disposition of those coming to the Emergency Room was as follows: 27.7 percent were told to return, 54.2 percent were dismissed and 7.1 percent were admitted to the hospital as in-patients.

These findings suggest that the Emergency Room of the hospital plays an important role in the health delivery system in the target area. Earlier in this report it was noted that the hospital was viewed favorably by the largest majority of the respondents in that study. Users of the Emergency Room tend to be younger (74 percent under age 45), males (58.2%), and single (48 percent of the sample , compared to 24 percent of the regions population), and approximately 72 percent had their own family doctor.

It was noted that approximately 50 percent of the patient visits to the Emergency Room were for non-emergency purposes. Welfare recipients were less likely to use the Emergency Room for non-emergency purposes (approximately 26 percent) compared to those with insurance (53.4 percent) and those with no insurance (52.6 percent). A similar pattern exists when we compared the type of visit with employment status.

The data indicate several interesting findings which may shed light on the use of the Emergency Rooms within the health delivery system. Approximately 72 percent of the patients at the Emergency Room had a family physician and approximately 82 percent were covered by some kind of insurance or some other form of compensation.

Several possibilities for the use of the Emergency Room for non-emergency treatment seem possible. First, health insurance may cover visits to the Emergency Room but not visits to the doctor's office. Thus, the use of the Emergency Room may be a means for some to economize health care. Second, many visits may be a result of accidents or illnesses which occur at a time when the family physician is not available. The Emergency Room is open 24 hours a day and seven days a week. Third, the Emergency Room staff request some patients (approximately 28 percent) to return for further care.

It is clear that further analysis is necessary. In the restudy of the Emergency Room additional data was collected and comparison of changes will be included in the analysis. The above data clearly indicate that the Emergency Room at the hospital is an important element in the health system of the target area.

Health Needs and Practices[12/]

In late 1975, a survey of 209 households (703 individuals) responded to a rather detailed questionnaire. This survey was designed to identify health care practices and needs in order to provide information for planning by health care agencies. Families were asked about the existence of any health problems in their household and the health care received by the family members. Their opinions were also sought regarding health needs and priorities for the area, health and nutritional

beliefs and practices and what factors they consider important in choosing a family doctor. Interviewers were provided by three local agencies: the Quinebaug Valley Community College; Annhurst College; and the Quinebaug Valley Health and Welfare Council. All of the interviewers received instructions from the research methodologist.

The sample was based upon a two stage random geographical sample. Within the randomly selected sub-units, ten households were selected for interview consisting of every fourth house from a randomly selected point in the sub-units. The age and sex composition of the sample corresponded closely with similar data from the 1970 census. The interviews took approximately 45 minutes and covered a broad range of subjects related to health.

In the analysis of illnesses in the target area we used the term ILLs to refer to serious illnesses and several specific but not so serious illnesses, leaving out vague and minor illnesses and general physical conditions. Three factors were found to be moderately associated with the amount of illness in a family. They are: 1) having a family doctor, 2) the amount of out-of-pocket medical expenses, and 3) the number of people in the household. The moderate association of these factors to ILLs may in part be accounted for by two things: 1) the strongest factor influencing ILLs is age which is an individual characteristic, and 2) some factors may be influenced by the effects of other factors.

ILLs that were reported not treated but reported by the respondents were also analyzed. Approximately two-thirds (64 percent) of the households reported one or more ILLs which were not treated by physicians. Summarizing, two major points have been shown in the analysis of treated and non-treated ILLs. 1) Household size and the number of children are directly influenced by ILLs and condition the relationship between family income and ILLs, and 2) the link between household levels of ILLs and participation in the health care system (indicated by family doctor and medical expenses) is more complex than the simple equation, "more care = less ILLs" suggests. Increased doctor care may often lead to the identification of more ILLs which may or may not be treated.

Both illnesses and non-treated illnesses increase with age with greater increases for females than males. Those individuals who are separated, widowed or divorced also showed greater increases than among the married. Among young adults and the elderly, illnesses decrease as educational attainment increases. Circulatory illnesses increase with age for both males and females but the greatest increases are among the females and become more pronounced at a younger age than for males.

Family Planning and Preventive Gynecological Care - The survey questionnaire also contained a series of questions related to preventive health care and family planning. Families which indicated a need for family planning information appear to have received it. However, the data suggest that this information and the decision to use family planning techniques were made both before and after the birth of children.

In other words, for many, information on family planning may be sought after the "unplanned" birth of a child. This relationship between recent births and the adoption of family planning practices was much stronger than traditional social factors such as income, occupation of the family head and family size.

Almost all of the respondents expressed a knowledge of preventive health care for women such as self-breast examinations and annual pap smears, but only 75 percent indicated that they do practice self-breast examination and 63 percent reported having a pap test during the past year. Thus, most women both believe and practice preventive health care. Families in which the head of the household is unemployed have the worst records in preventive health care practices.

Selecting a Family Physician - The respondents were asked a set of nine items related to the selection of a family physician. Areas covered included type of care, availability, fees, and local residency. Respondents ranked each item on the basis of its importance in selecting a physician. In the earlier discussion of priorities of care needs, general practitioners were given the top priority. A summary measure was developed for each respondent and comparisons were made related to occupation, income, having a family doctor and fees.

In general, there is support for the proposition that those who spend less on medical care, and have less to spend, are more concerned about costs and accessibility in selecting a physician, while those who spend more, have more to spend and are more involved in extensive care (hospitalization, voluntary services, etc.) are less concerned about costs and more concerned about the quality of the treatment.

Health Beliefs - Respondents were given a wide-ranging set of 25 "agree - disagree" statements concerning health, diet, medical care, illnesses and preventive practices. Overall there was high agreement with the "correct answer" to the items. From this we can conclude that the sample, as a group, is fairly well informed about health care practices and aware of preventive health measures.

When the entire set of 25 statements is used as a Good Health Scale it was observed that: 1) those with a family doctor score higher on the scale, 2) those who spend more for health score higher, and 3) those in the upper income half score higher. Only the retired stand out as having significantly lower ratings on the scale.

The 25 items can be separated into two sub-scales; a ten item good diet scale, and a five item medical attitude scale. When the ten item good diet scale is related to socio-economic characteristics it was found that: 1) having a family doctor and medical expenses were not related to good diets, and 2) income had a positive association with good diets (26 percent of the lower income half compared to 14 percent of the upper half). Occupational groups presented an unexpected pattern. The retired had the highest proportion indicating a poor diet (32 percent), the unemployed and service-farm group had the lowest proportion (10 percent) with white collar and blue collar occupational groups in between (20 percent). These findings suggest that the younger generations have more knowledge of the contents of a good diet. Knowledge, however, may not be equivalent to practice.

When the five item medical attitude scale is used, it was observed that: 1) having a family doctor was negatively associated with attitudes toward medical services; 2) family income was positively associated to medical services (33 percent of the lower income half had favorable attitudes compared to 17 percent of the upper income half); and 3) the unemployed, service and farm workers and blue collar workers had the highest proportion of negative responses. It should be noted that only 9 percent of the service and farm worker categories indicated a positive attitude toward medical services on the scale.

Health Care Priorities - Earlier in this report we discussed the findings from a series of modified Delphi questionnaires. The rankings from that questionnaire were included in the household survey for comparative purposes. It should be noted that the majority of the respondents to the Delphi questionnaire were either directly or indirectly involved in the health delivery system. These rankings are similar with both giving primary health care the highest priorities. There are several changes in the rankings which reflect the difference between the two samples: hospital facilities were ranked last in the Delphi survey and second in this survey, dental clinics ranked third in the Delphi survey and eighth in this survey and transportation ranked sixth in the Delphi survey and last in this survey. Any other shifts involved two positions or less. These changes suggest the need for further analysis. Ranking of income and occupation sub-groups reveal differences in priorities that have relevance for program planning.

The sample was divided into quarters according to income. All income groups agreed that the most important need is for adequate primary care and that those services most removed from primary care such as alcohol programs and drug programs are given lower priority. The importance of money for health care and transportation increase as income decreases, while mental health care and health education tend to increase as income increases.

Similar differences in priorities were found in the rankings for five different occupational groups: white collar, blue collar, service-farm, unemployed and retired. The occupation category most different from the others is the unemployed. The unemployed list money fifth and transportation sixth. Both of these items are significantly higher than the other occupational groups. Blue collar and white collar listings are similar and all five occupational groups gave the highest priority to medical clinics.

In summary, while there has been a consistent emphasis on the need for primary health care in all of the various studies, the type of care (medical clinics, doctors, hospitals facilities, etc.) has varied. The results of the sample survey enabled us to look more extensively at the problem of health care needs as seen by the respondents. Significant differences were found when we controlled for the priority of needs which shows some variation. Money (costs of care) and transportation ranked higher in priority for the lower income and unemployed subgroups. Higher income groups and white and blue collar workers tended to give more support to preventive programs. It should be

noted that the priority rankings from the Delphi survey and those from this survey are similar.

Two other points of interest derived from the survey are related to the beliefs and practices of the respondents. First, the respondents demonstrated that they were well informed about health care practices and diets, aware of many basic preventive health measures and the values of the services of physicians and the hospital. Generally those in the upper income half scored higher on the good health scale and were better informed on health care matters. Second, most women in the sample were aware of and used preventive gynecological care and practical family planning. Unemployment and low income were the principal negative factors.

SUMMARY OF TITLE V RESEARCH

Title V's research activities focused on three main purposes: 1) to aid Extension Service activities and local agencies need for data; 2) to conduct basic research on the characteristics of the local health system; and 3) to evaluate changes in the health system and keep resident interest alive through personal involvement. From the start, Connecticut's Title V project had as its basic goal the development of cooperative programs which would remain active after the project terminated. We feel that this objective was met and many of our basic objectives have been reached.

Primary medical care was identified as the basic need in the target area by the vast majority of the respondents to the various research programs. Simply providing primary care, however, would not adequately meet the health needs of the area, but there are important sub-group differences. Lower income residents and the unemployed expressed the most negative attitudes toward organized medicine in the area. The overriding health needs identified were for accessible, low cost primary care. The lowest priorities were given to more peripheral services such as mental health, health education, etc., with the greatest support coming from the higher income groups.

The Emergency Room at the local hospital appears to be an important factor in the local medical delivery system. Approximately 50 percent of the individuals treated at the Emergency Room were for non-emergency purposes. Approximately 82 percent of the visits were covered by some form of compensation and approximately 72 percent had their own doctors. In other words, the Emergency Room at the hospital provides some primary care functions in the system. The data from that suggests that it may represent an alternative source of primary care on weekends and at other times during the week when their doctors cannot be reached.

The hospital also seems to be an important element in the changes in the target areas' health system. It is quite active in providing needed services, working on committees seeking more primary care and committees which are working to improve the system. Other important

elements were the District Department of Health and the Quinebaug Valley Health and Welfare Council.

The research element of the Title V project is continuing through the summer of 1978 in order to complete the longitudinal analysis of the use of the Emergency Room. The above discussion of research completed during the project indicates the broad range of research initiated under the Title V project. During the project we were able to provide some funds for a Dental Hygienist to do a pilot study of dental problems in the Northeast District Department of Health. We also provided funds for a graduate student in the nurse practitioner program at the University of Connecticut for an analysis of the effects of merging of nursing agencies in the district towns. The research sociologist served as a member of the research committee and was available for consultation by this committee as well as other medical agencies in the community. Finally, a major task of the sociologist was in showing the residents of the area the value of research in applied programs and teaching local individuals how research can be accomplished and its value in the development of proposals for outside funds.

Regina Goldrat, the first research sociologist, died on April 30, 1976 after several months of illness and Mrs. Judy Gould, the nurse practitioner resigned during the summer of 1976. The loss of these individuals resulted in a turnover of field personnel. The new research sociologist was not hired until June 1976 and had to spend time reviewing the previous accomplishments of the project and become acquainted with the key individuals in the target area.

Discussion and Conclusions

Title V of the 1972 Rural Development Act provided funds for a series of pilot programs "to expand scientific inquiry and educational backup" for rural development in the various states.[13] Each project was to: 1) concentrate on a limited area, 2) give emphasis to rural areas, 3) involve the administratively responsible Land Grant University and other public or private colleges and universities, as appropriate, in meeting with high priority extension and research needs of the area(s), 4) give priority to education and research assistance leading to increasing job and income opportunities, improvement in the quality of life, improving essential community services and facilities, and enhancing those social processes necessary to achieve those goals, and 5) be consistent with statewide comprehensive planning and development efforts and objectives. The act also provided for an administrative organization and funds were appropriated through the state Extension Service and the Experiment Station. The Dean of the College of Agriculture and Natural Resources, appointed a state Rural Development Advisory Council which reviewed and approved all programs.

As noted earlier, Connecticut's project originally focused upon the development of a primary health center. Our intent was to aid in the development and implementation of the center during its first year with the community taking over the operation and funding of the

center during the second year. It soon became evident that the community was not ready to accept this responsibility and the planning committee had been over optimistic.

The planning committee had adopted a quasi model at an early meeting. It was clear from the beginning of the project that the members of the planning committee would not be able to devote large periods of time to the project because of other responsibilities. Thus, the committee's role was one of consultation and advising the field personnel and providing as much assistance as feasible.

The project's model was based upon the assumption that representatives in the target area should participate fully in the selection of programs and their implementation. Flexibility was considered necessary in order that on-going work might be adapted to what appeared to be feasible within the time span of the project. Research and education (extension) should work as closely as possible.

Basically, community development was viewed as a social process in which the initiation for change came from the target area itself. The two professional field workers were resources which could be used by residents and professionals. When the objective of a primary health clinic was dropped, the field workers entered the community not as proponents of a designated plan but as respondents to locally defined needs. Once they gained recognition in the community through the sponsorship of the County's Extension Field Coordinator and it was obvious that change would take place through democratic processes, the field representatives were accepted by those in the target area. The field representatives could also be the source of innovation of social change through their role as educators and their accepted positions in the target area.

Under this suggested community development model, the process is completed when the programs are taken over by the target area and become part of the on-going system. In other words, the change agents are successful when they are no longer needed. But, it should be remembered that change is a constant process and new program development should also be part of the process of change. This "community development model" involves: 1) the establishment of criteria to identify problem areas and set up useful results, 2) the selection of a relevant target area, 3) a community with presumed responsive characteristics, 4) the development of "first approximation" objectives and procedures, 5) the hiring of professional research and educational personnel sensitive to the projects objectives and acceptable to the target area, and 6) the implementation of attainable objectives.[14] The success of this model still needs further testing but its application in Connecticut provided the flexibility needed to respond to locally identified needs. As the nurse practitioner and the researcher became recognized and accepted their activities became merged with the activities of parts of the health system in the target area. This acceptance tended to carry over to the new personnel employed during the last year of the project.

The following is a general statement of what we feel we have learned as a part of this cooperative project. In review, it should be noted once again that the project originally was built around a proposal to develop a primary health care clinic. This decision was based upon the extensive contacts with health personnel and residents of the area by a community development generalist. This decision can be largely attributed to the fact that none of the people responsible for drafting the proposal had any experience in the health field. During the first 6 months of the project, a number of meetings were held with representatives of various health agencies, the School of Nursing, the University's School of Medicine, etc.. It became obvious that our original plans could not be accomplished within the time span established by Title V and the funding available.

It was at this point that the nurse practitioner and the research sociologist were hired and introduced to the target area. Both individuals were given considerable freedom to work with the local community within the guidelines set by the projects objectives and the "flexible model". In retrospect, it may have been a blessing in disguise when the plan for a primary health care center had to be dropped. The project did not go into the target area with a well defined preconceived plan. The nurse and the researcher were essentially required to define their roles through interaction with individuals and groups in the target area. They assumed the role of additional resources who were concerned and motivated to help improve health care in the region. In a short time they were serving as ad hoc members of various committees in the region. Through participant observation and listening to individuals in the region, they were able to identify areas where they could be of service and where they could apply their expertise to assist in meeting locally defined needs. As the roles of the nurse practitioner and the researcher became more clearly accepted they became instrumental in preparing proposals for outside funding, developing educational programs for health personnel in the target area and providing data which supported program development. Most of these activities have been summarized in this report or in an earlier report published last year.15/ The earlier report focused more extensively on programs implemented by the nurse practitioner, often with the cooperation of the project researcher. All of these programs have either been completed or absorbed into the activities of local agencies. It is interesting to note that 33 months after the initial advisory committee was appointed, a local advisory committee organized largely by the project nurse was successful in acquiring funds to build a primary health care clinic to be staffed by two physicians. This clinic was officially opened on September 12, 1977.

All education and/or extension programs were completed by the termination date of September 30, 1977. During the last year of the Title V project, extension examined the extent of adolescent health problems including teenage mothers, drug and alcohol use, and sexual activity. It was evident that this area of public health was beyond the scope of this project so no follow-up work is planned or proposed.

Research Problems and Perspectives - The implementation of Title V presented a set of problems which has been a continuing problem in sociological research. How can research contribute to the solving of social problems and provide the information needed by change agents? From the beginning of the project it was clear that the individuals on the committee had different views on research and its potential contribution to social action programs. The usual turnaround time for most research projects is relatively long while those involved in social action programs need information almost immediately. With both the extension component and the research component starting at approximately the same time, it was evident that the coordination of research and extension activities would be difficult. This was further complicated by the fact that the researcher was located at the University while the nurse was located at the County Extension Office approximately 35 miles away in the target area.

These difficulties were largely resolved by the social researcher and the nurse practitioner. They maintained relatively close relationships despite the distance and cooperated on a number of the programs in the target area. The function of research was redefined to include participant observation. Research, both basic and applied, was utilized as a means of maintaining the interest of residents in the target area and increasing their awareness of the project's team as a resource. Thus, research served the dual purpose of providing needed information and maintaining active interest in the target area. The papers reviewed above were prepared primarily for circulation in the target area. The final paper in this series on changes in the use of the Emergency Room is forthcoming.

One problem confronting the researcher is - what audience to write for? There are many audiences, including fellow sociologists, those in the medical profession, local populations, etc.. At the present time only a limited amount of the available data from the survey has been analyzed. Future efforts will be directed toward more professional audiences.

In summary, we feel that the Title V project in Connecticut has made a permanent impact on the health care system in the target area. Those of us working on the project have also learned a lot from our experiences. In looking back we can see several things which we wish we could do over again but this is true for most pilot projects. Organizationally, things may have gone much smoother if we had developed a more fixed chain of responsibilities but then we would have lost some of the flexibility which proved successful. Finally, the success of the project may be largely attributed to the nurse practitioners and sociological researchers employed to work on the project.

FOOTNOTES

1/ Public Law 92-419, section 603. See also: Regulations to Implement Portions of the Rural Development Act of 1972, Department of Agriculture (Federal Register, Vol. 38, Number 201).

2/ The ten towns are: Brooklyn, Canterbury, Eastford, Killingly, Plainfield, Pomfret, Putnam, Sterling, Thompson and Woodstock.

3/ Ms. Judy Gould, the Public Health Nurse, was a nurse clinician with a Master's Degree in Public Health while Ms. Regina Goldrat was an ABD in Sociology.

4/ Regina Goldrat and William H. Groff. The Health Status of Senior Citizens at the Quinebaug Valley Senior Citizens Center in Plainfield, Connecticut. Title V Project Paper No. 1, October 1975.

5/ Seventy-two percent of the respondents had a car in the immediate family; many drove themselves and did not have to rely on others. See also: Walter C. McKain, Dignity for the Living. Area Agency on Agency, Region 3, 1975.

6/ Donald S. Francis, William H. Groff and Nancy P. Weiss. Health Care in a Rural Community: Northeastern Connecticut. Title V, Rural Development (November 1, 1977), pp. 7-9.

7/ Regina Goldrat and William H. Groff. Priorities for Health Care Delivery in the Northeastern Planning Region. Title V Project Paper No. 2.

8/ Olaf Helmer. Social Technology. (New York: Basic Books, 1966); and Starkweather, et al., "Delphi Forecasting of Health Care Organizations," Inquiry, Vol. XII, March 1975, p. 37.

9/ Ibid.

10/ Beatrice Manning. Report on Survey Undertaken at Plainfield Health Fair. Title V Project Paper No. 3, November 1976.

11/ Beatrice Manning and Sharla Singleton. Emergency Room Utilization at Day Kimball Hospital: A Preliminary Report. Title V Project Paper No. 4, December 1976.

12/ William E. Clark, Beatrice Manning and William H. Groff. Health Needs and Practices in Northeastern Connecticut. Title V Project Paper, September 1977.

13/ Public Law 92-419, op.cit.

14/ See Francis, et al., op.cit., pp. 18-19.

15/ Ibid.

TITLE V PUBLICATIONS

The following selections relate directly to the Title V project in Connecticut. A nominal charge for reproducing the reports may be levied. Copies of these reports may be obtained from:

William Groff
U-96
University of Connecticut
Storrs, CT 06268

Extension

1. Community Development Through Improved Public Health Practices in a Disadvantaged Community, Gould, Francis, Groff, September 1976, Cooperative Extension Service, pp. 26 - This expanded report elaborates on the sections of the shorter report and describes the elements of community development which were incorporated into the Title V Health Project.

2. Health Education Project, Eller and Gould, September 1976, pp. 3. An outline of a joint effort between the Title V project and the 4-H program in Windham County, Connecticut. The work focused on a summer recreation program in Sterling, Connecticut for children in grades K-10.

3. Health Education for Senior Citizens, Gould, pp. 60. This booklet is designed for use by health educators, who are presenting health information to senior citizens. Emphasis is placed on maintaining good health and on age-related problems and concerns of the elderly. It is a compendium of articles and teaching materials designed for brief (15-30) minute health talks that can readily be understood by the consumer.

4. Physical Assessment Short Course, Gould, pp. 5. Letters of support from community leaders. Outline of a six session educational course on physical assessment practices and techniques for public health nurses in the Northeast Public Health Nursing Committee.

5. The Problem Oriented Record, Gould, pp. 7. An outline for using the Problem Oriented Record as a way for Visiting Nurse Associations to standardize the recording of patient health care.

6. A Project Proposal with Particular Reference to Northeastern Connecticut: Health Care for the Elderly, A Preventive Approach, Gould, pp. 19, June 1976. This proposal, which was funded by the Region III Area Agency on Aging, has as its goals: to reduce the anxieties of health concerns of senior citizens, to identify the health needs and problems of the geriatric community, and to prolong the independent status of elderly individuals by discovering ways to reduce medical emergencies, hospitalizations and the onset of terminal care.

7. Health Care in a Rural Community: Northeastern Connecticut, Francis, Groff and Weiss, November 1, 1977, Final Report - Title V, Rural Development. This report summarizes extension activities related to Connecticut's Title V project.

Research

1. Gina Goldrat and William Groff. The Health Status of Senior Citizens at Quinebaug Valley Senior Citizens Center in Plainfield Connecticut. Title V Project Paper No. 1, October 1975.

2. Gina Goldrat and William Groff. Priorities for Health Care Delivery in the Northeastern Planning Region. Title V Project Paper No. 2, November 1975.

3. Beatrice Manning. Report on Survey Undertaken At Plainfield Health Fair. Title V Project Paper No. 3, November 1976.

4. Beatrice Manning and Sharla Singleton. Emergency Room Utilization At Day Kimball Hospital: A Preliminary Report. Title V Project Paper No. 4, December 1976.

5. William E. Clark, Beatrice E. Manning, and William H. Groff. Health Needs and Practices in Northeastern Connecticut. Title V Paper No. 5, September 1977.

6. A longitudinal study of the uses of the Emergency Room at Day Kimball Hospital will be published within the next few months.