Education in Oral Polio Vaccine Program

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IS THE TERM "community organization for health education" one that is understood, and the connotations accepted, by public health personnel as it relates to families with limited education and income? Is it possible for persons with a professional background to accept emotionally as well as intellectually the premise that persons from so-called hard-core areas can contribute substantially to the success of health programs? These questions came up time and time again in the Hillsborough County oral polio vaccine program which was conducted early in 1962 in Florida. (Tampa is the county's principal city.)

Other questions were: What is a hard-core group? Do we give them this harsh name because they do not respond to our overtures? A hard-core area by public health definition may not be regarded as such by a life insurance agent, a bolita ticket seller, or an itinerant evangelist. Are we in public health a hard-core group in that we have built our programs and practices around the way we think persons of limited income and education ought to act?

A few studies in Florida, encouraged by the Public Health Service's "babies and breadwinner" program suggestions for increased poliomyelitis immunization, had raised similar questions. The concept of involving local leaders and community organizations is not new (political campaigners have used it for years), but it was found that this deceptively simple method could be outstandingly successful, if the public health staff knew how to identify the true leaders and how to work with them. A poliomyelitis immunization program, using Salk vaccine, in a small rural group had resulted in a 500 percent increase in protected persons; a liaison worker has been used most effectively in an agricultural migrants' project in south Florida; local leaders in a remote rural area, concerned with hookworm, were able to interest persons who had the worms in improving their sanitation practices. An X-ray campaign in another locality resulted in a 500 percent increase when local leaders were brought into the picture. The 1960 Dade County (Miami) community oral polio program had revealed much about acceptance of this type of immunization by those whom county health departments believe to be hard-core families (*1*). The Hillsborough program provided an opportunity to try out, on a much larger scale, some of the techniques which were being developed by public health personnel in Florida.

The objective of the program, here oversimplified, was to feed oral polio vaccine (trivalent) in a field trial to a potential 250,000 persons under 40 years of age in the county. A public relations program was underway when health educators were invited to participate. The educators' specific charge was to concentrate on children under 6 years old in the lower socioeconomic group. Planning for this phase of the program began less than 2 months before administration of the vaccine began.

Discussion of the public information aspect of the program is not essential here. It consisted of the usual proclamations, sound trucks, radio, newspaper, and television coverage, a telephone information center, and announcements to schools and civic and church groups. It was presumed that this approach would reach many of those in the upper and middle class for it would appear that four factors—basic education, specific information, personal-

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ity, and group memberships—are sufficient to bring the vast majority of these persons into preventive health programs.

It was decided to concentrate efforts on community organization among those least likely to be reached by these announcements, since the Dade County program had shown that newspapers reach less than half of those in the bottom income and education brackets, and less than half of these accepted oral vaccine. In this class, also, are a substantial number of social isolates who would respond only if brought into the mainstream of person-to-person communication.

Nursing and sanitation supervisors on the staff of the Hillsborough County Health Department selected 14 areas in the city and county. These were usually analogous to nursing districts. Many were in a cluster in one section of the city, but there were also distinct "pockets" throughout the entire county. At the beginning of the program, the prospect of this work was not always accepted with wild enthusiasm, but as the program developed, nurses and sanitarians not involved would stop by the health educator's desk and plaintively state, "You know I have some underprivileged people in my district who ought to be included. Can't you help them, too?" Regrettably, only the 14 original areas were covered by this process.

The basic objective of the "community organization for health education" was to involve people within their own groups. For approximately 2 weeks public health nurses and sanitarians, as they went about their daily tasks, asked the question that would help identify local opinion molders and leaders. The question, phrased in various ways to suit the staff member and the person to whom he was talking, was essentially: "When people around here are sick, but not sick enough to go to the doctor, who do they talk to if they don't talk to the public health nurse?" Quite frequently it was found that one person was asked for advice on many subjects, but many "health opinion molders" were revealed. In some instances, the nurse or sanitarian had correctly guessed who would be named; however, persons known to them but not regarded as influencing health behavior were also revealed. And, of course,

names of persons unknown to the staff were elicited.

The number of persons selected to serve as a local committee ranged from 1 or 2 in several rural areas to 5 or 6 or more than 30 in other areas. The committee was selected, whenever possible, so as to have a geographic spread; that is, so all parts of that particular area were represented. The next step was to select one of the outstanding persons and plan a meeting around him. The selected persons were told that the reason for the meeting was to ask for their advice as to the time, date, and place for the administration of the oral vaccine. Emphasis was laid on the fact that they had been chosen by their neighbors.

Unfortunately, in a few meetings it developed that certain staff members had not asked the question widely. They preferred to work with persons with whom they had had previous contact, with whom they felt at ease, and who were always referred to as "the leaders." It was apparent that they were not wholly comfortable in working in this way with those of low socioeconomic status. They were not at all sure that it was wise to accept advice from people who are more often on the receiving end for advice and material assistance.

One concept was emphasized many times: one must go into a meeting with one of these groups believing that there is wisdom within it and that people of any origin have something concrete to offer.

The meetings went something like this: The nurse or sanitarian explained that this small committee had been called together to combat a serious health hazard and they were going

to be asked to help, particularly in selecting the date, place, and hour of the polio vaccine feeding in their area. They were told that their advice was sincerely solicited and would be accepted as far as possible. Other points were: They knew better how to talk to their friends and neighbors than health department personnel did, they knew how to use the right words and right reasons for getting people to take the vaccine, they were doing a great humanitarian service by participating in this program, and we needed them. Next a short explanation of oral polio vaccine and poliomyelitis itself was given and questions were invited.

The phrase used to start the discussion was, "Remember, no question is silly or stupid if you don't know the answer." A lively session usually ensued. These people confirmed what the Dade County program had determined, that "reported worry about polio was not significantly associated with vaccine acceptance, but knowing someone who had polio sharply increased the possibility of having taken either or both vaccines."

At a meeting of one committee, several urged that a young man who had had bulbar poliomyelitis be placed in a wheelchair and rolled up and down the streets so that people could see its terrible effects. The public health nurse present hastily interjected that his family would never consent, so that suggestion was dropped. Finally, at the end of the meeting, time, date, and place of administration of vaccine in the particular community was brought up again. No restrictions were placed on the time of day, and many clinics were held in the evenings and on weekends.

Some treasured memories remain of these meetings. Examples are: the elderly woman who wandered into a committee meeting and asked if she might stay, listened attentively, and then declared she wanted to work and asked only one payment, a dose of the vaccine. A committee member said she was glad to attend the meeting but she wouldn't be able to do much as she was expecting her third nervous breakdown any day. She postponed this event to become one of the area's hardest workers. At an evening meeting arguments arose. The area contained persons from low, middle, and upper class families, and all these groups were represented. There was latent hostility from the beginning, particularly between some of the low and upper class members, which erupted openly when someone lit a cigarette and was reminded he was in a Sunday school building. A subgroup quickly gathered outside. Finally, arrangements were made to serve all, with particular emphasis on a subdivision where the less privileged lived.

Of the 14 areas, committees in 10 were able to carry through some basic planning for letting their friends and neighbors know about the upcoming vaccine program. There was not always unanimity of opinion among the committee members as to how to reach the community. It would have been desirable to have better followup by health department staff members to see if the committee was carrying out plans agreed to at the meeting, but there was no opportunity due to the tremendously increased workload borne by all personnel. A simple pamphlet which committee members had helped to write and a poster they designed should have been prepared early in the program. The notice to the schools was not pretested and was rewritten by several principals of schools in the affected areas. Time and time again the staff reverted to reliance upon newspaper, radio, and TV to reach all families, only to become disillusioned.

Longshoremen were recognized as powerful opinion molders with their fellow employees, only after they volunteered to help carry supplies and assist at clinics, once the program was underway.

Certain groups were reached only casually and a limited number accepted the vaccine: those aged 14 to 18 years, out of school; between 19 to 25 years, unmarried; and between 19 to 25 years, married and childless. The usual line of communication between school and home, and prenatal and well-child clinics did not exist for them. No attempt was made to find molders within these groups. All that appears necessary is for people to feel they have a group of friends and to believe that most or all of these friends will be taking or have taken the vaccine.

"Oral" was a word frequently misinterpreted, though many knew it had something to do with the mouth. It apparently indicated that you were "stuck in the tongue" because isn't all such

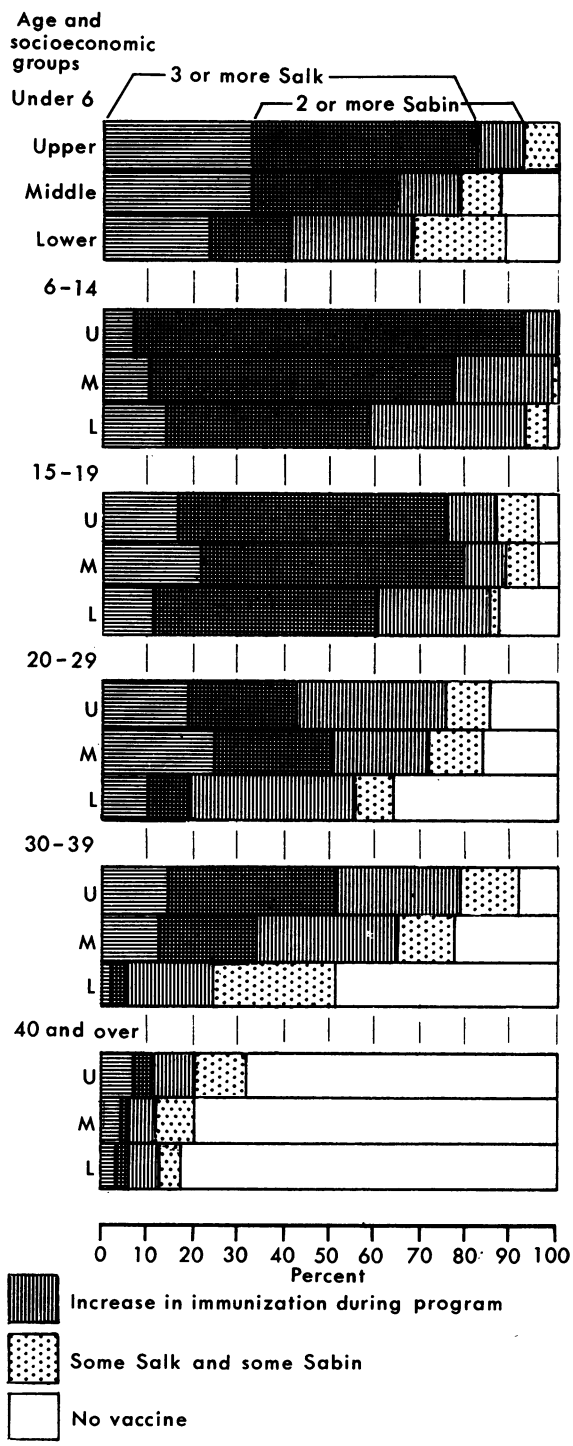
protection given by needle? Following the drinking of the vaccine, people were heard to say that, "That shot wasn't so bad."

A review of events of the program brings up certain questions: How many social isolates were reached? Did those who took the vaccine learn anything? Will interest in health programs carry over for the health opinion molders? How many would have taken the vaccine anyway because they were accustomed to attending neighborhood clinics? Did this group return for the second feeding with a minimum of stimulation? How many of the hard-core group took polio vaccine who do not ordinarily take advantage of health services? Can health department staff members transfer their learning to other programs?

What were the results? More than 178,000 doses of vaccine were given at the first feeding; 196,000 took it 8 weeks later. Prior to the program only 42 percent of children under 6 years old in the lower socioeconomic group were protected. During the program this figure rose to 68 percent (see chart). However, another 20 percent received some protection later, but less than the recommended number of doses. This leaves 12 percent unprotected. It has been found in many parts of the country that this group is the least protected.

Health departments have evolved from an authoritarian background and, as personnel are frequently the product of an authoritarian institution, working with low socioeconomic groups may prove threatening. Also, some staff members cling to what they consider the hard-to-reach person's image of public health personnel; a paternalistic, benevolent, and advice-giving person. It was not determined what these people truly conceive a health official to be.

Percentage of persons in Hillsborough County, Fla., vaccinated against poliomyelitis as of June 1962, by age and socioeconomic status



Summary

In the 1962 Hillsborough County, Fla., oral polio vaccine program, the aid of local leaders or opinion molders from each low-socioeconomic area was solicited toward persuading underprivileged families to participate.

Health department staff met with the leaders to explain poliomyelitis and the oral vaccine, and to point out how they could stimulate their

friends and neighbors to accept the vaccine. The staff also asked the leaders' advice as to time, date, and place for administration of the vaccine.

Aimed at 250,000 persons under 40 years of age, the program reached 178,000 during the first feeding period and 196,000 during the second. The percentage of unprotected underprivileged children under 6 years of age dropped from 58 percent before the program to 32 percent afterward.

REFERENCE

(*1*) Johnson, A. L., Jenkins, C. D., Patrick, R., and Northcutt, T. J., Jr.: Epidemiology of polio vaccine acceptance; a social and psychological analysis. Monograph 3. Florida State Board of Health, Jacksonville, 1962.

Hospital and Nursing Home Use

The rates of utilization of general hospitals and skilled nursing homes by State and region and the relationships of the rates for the two types of facilities have been presented in a report by Louis S. Reed, Division of Program Research, Social Security Administration. Data from the American Hospital Association and the Public Health Service were used in calculating the rates.

The national rate for general hospital admissions in 1960 was 129 per 1,000 population. An average of 1,091 days of hospital care was given per 1,000 population. About 11 percent of the days of hospital care were given in long-term hospitals (those with an average length of stay longer than 30 days). Skilled nursing home care was provided at the rate of 560 days per 1,000 population, about 50 percent of the rate for hospital care. Days of care in both hospitals and skilled nursing homes total 1,651 per 1,000 population.

These rates vary widely among the States, however. Days of hospital care per 1,000 population range from 1,630 in Delaware to 669 in Mississippi. The rate for nursing home care ranges from 1,568 in Washington to 70 in North Carolina. The combined rate for both types of care ranges from 2,640 in Massachusetts to 827 in Alabama.

In the country as a whole, 59 percent of the total days of hospital and nursing home care is provided in short-term hospitals, 7 percent in long-term hospitals, and 34 percent in nursing homes. The distribution varies greatly among the States and regions. In the South Atlantic and East South Central States, which have a relatively low total volume of care, about 75 percent of care is given in short-term hospitals compared with 50 percent in the New England and Pacific regions. In New Hampshire, Oklahoma, Idaho, Washington, and Oregon, the days of skilled nursing home care exceed the days of care in short- and long-term hospitals combined.

An interesting contrast in patterns of care is offered by California, where a considerable volume of long-term hospital care is provided through the county hospitals, and Washington, where the volume of nursing home care is twice that of all hospital care and where almost no care is provided through long-term hospitals.

Reed stated that, because of the different patterns of hospital and nursing home use among States, any estimation of the volume of hospital care needed by a given population must include close consideration of the kind and amount of care being provided by nursing homes.

The ability to purchase hospital and nursing home care is a factor but by no means the only one in the great variation in volume of care among States, Reed stated. He demonstrated an association between higher per capita income and greater number of days of care per 1,000 population. The coefficient of correlation of .53 for hospital care alone and .54 for combined hospital and nursing home care indicates some but not a high degree of correlation.

Other factors affecting patterns of care are the age distribution of the population, the extent to which the population has hospitalization insurance, and the customary practices of physicians concerning hospitalization. Finally, some of the variations in the data on nursing home care reflect differences in definitions or standards used by the States to license skilled nursing homes rather than real variations in volume of care.