Use of Community Residents as Interviewers in a Dental Heath Care Research Project

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CAUSE CONSUMERS MUST BE ACTIVE PARTNERS in delivery of health services, it is important to deter- e their perceptions about the health care process: r complaints, their expectatons, and other factors cting health care use. Donabedian (*1*), noted for his k on medical care organization, points out that ough such information is essential, together with luations of structure and outcomes in assessing lity of health care delivery, it is often inaccessible, icult to obtain, or not available from appropriate rces—consumers of health care.

or health program evaluators and administrators, problem of access to information is intensified when rmation is desired from persons or families who are -users of health services. Little is known about the ls of such families and the barriers that may be venting their entry into the health care system. abedian (*2*) believes that information concerning ential clients' perceptions should be included in the appraisal of health care to provide evidence of the effectiveness of health care services and to indicate areas that need attention and improvement.

The research procedures used to collect such information from both users and non-users of dental services

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through the employment of a community resident coordinator and 14 community resident interviewers are described here.

Background and Framework of the Study

To systematically collect information on perceptions of health care delivery, generally inaccessible to program evaluators or administrators, was one goal of a 2-year ecological study of family dental behaviors and children's caries experience which began in 1970. The major objectives of the investigation were to study in a natural population the relationships between (*a*) family characteristics, dental health behaviors and attitudes, and the use of dental services and (*b*) individual, family, and community characteristics and children's dental conditions (*3*). Both the research design of the study and the fact that access to the children and ultimately to their parents was provided by a school district rather than by a health agency made it possible to obtain comparable information about children and their families who received treatment and those who did not. Those who failed to receive treatment comprise the population subgroup most often untapped in assessments of the health care delivery process.

The ecological approach used to conceptualize factors affecting families' dental behaviors and children's caries experience employed two models that provided a comprehensive approach to the investigation. To investigate factors determining whether a family would obtain treatment for a child who had been found to need it for an obvious carious lesion on one or more permanent teeth, a general model was developed of factors which were hypothesized to affect parents' ability to successfully obtain the treatment. The model included sociological, psychological, economic, cognitive, biological, and environmental factors (*4*).

So that the investigators could study the contributions of various intra-oral and social factors to children's dental conditions, the second model was developed to use theories of the pathogenesis of dental caries and the findings of clinical, experimental, epidemiologic, and behavioral, and social science research in dentistry. The relationship between children's diets and their dental conditions and between their assessed oral hygiene scores and their dental conditions were studied along with other family and community characteristics (*5–7*).

The study sample consisted of 838 white third-grade children and their parents. Only whites were included in the sample to eliminate background variables which might affect disease susceptibility or accessibility of dental services. The children in the sample attended 14 public elementary schools that represented a broad spectrum of socioeconomic levels in the Minneapolis City School District, which had a total of 69 elementary schools. Data that were analyzed to answer the research questions were obtained from both children and parents over a 1-year period.

Child interviews and dental examinations. Each child was individually interviewed twice—once in the third grade and again in the fourth—by a trained community resident interviewer. Primarily, information concerning the child's diet and oral hygiene practices was obtained during these interview sessions; a few questions related to family attitudes and to past dental experiences. The interviewers were not aware of the children's oral conditions.

Following each of the diet interviews, each child received a dental examination from a research dental epidemiologist who assessed oral condition in terms of caries and oral hygiene indices. A gross assessment of quality of all the restorative work in the mouth also was recorded (*8*). A treatment priority was assigned to each child. If an obvious carious lesion was seen on one or more permanent teeth, the child was considered in need of treatment. The parents of such children were notified by letter, and a list of dental care resources available in the city was included.

Data collection from parents, phase 1. Data about family characteristics were collected from the children's parents (most often the mother) during the year between the first and second children's interviews and dental examinations. Demographic as well as attitude and behavior information regarding dental practices and visits was obtained from 93 percent of the families (*9*). Parents of all 159 children in need of dental treatment were interviewed at home by a trained community resident interviewer. To avoid interviewer influence upon these families, an additional randomly selected sample of 100 parents of children who did not require treatment were also interviewed. The interviewers were not told during this phase which of the children needed dental care according to the study criterion. The remaining parents in the study received a mail questionnaire which covered the same kinds of information collected during the home interviews.

Data collection from parents, phase 2. A followup dental examination of those children who originally were found in need of treatment was carried out a year after the first examination. Re-examination provided objective evidence as to whether treatment had been received. Following the second dental examinations, the parents of these children were again contacted at home by a trained community resident interviewer. The purpose of this procedure was to collect qualitative information about the strategies used by parents who had been able to obtain some or all of the treatment (67 percent) and about the barriers to obtaining treatment perceived by parents who had not been able to (33 percent).

By means of a case-log approach, the workers' assignments were (*a*) to document the specific strategies used during the year by families who had been able

provide for their children's dental treatment and (*b*) to document the barriers faced, from the families' points of view, by those who had not obtained treatment for their children during the same period (*10*).

The final phase of parent interviewing was conducted by workers who had not interviewed the same families during phase 1. Also, during this phase, the interviewers were told which children had actually received treatment, and they were instructed to offer all possible assistance to those families who had not yet obtained care. While the workers were able to assist some families during this phase, the goal of care for each child in need of treatment was not realized since many families could not afford treatment and yet were ineligible for any of the subsidized resources available in the community (*11,12*).

Rationale for Use of Community Residents

In this investigation, nonprofessional community residents were used to interview the study children and their families—including those who had and those who had not been users of dental services—as one technique of systematically collecting the data required. The interviewers and their subjects were racially matched. The procedures used in the selection, training, and supervision of the community residents to carry out individual interviews with third-grade children at school and with their parents at home may be of interest and benefit to others who engage in similar research. The study design did not allow comparisons between the use of resident interviewers and any other possible types of interviewers.

Two primary factors affected the decision to use nonprofessional community residents, rather than professional interviewers or graduate students, as data gatherers within the scope of a project with research goals. The first factor was the nature of the populations to be interviewed. These included (*a*) third-grade children with whom it would be important to establish rapport in order to insure candid responses and (*b*) parents of children who needed dental treatment for gross dental disease. It was expected that a majority of the parents of children needing care would be in a lower socioeconomic group than parents of children who were not in need of treatment. It was anticipated that the low socioeconomic population might not respond readily to a mail questionnaire (*13*), and this was the group whose input was critical to the research objectives.

Second, the decision was influenced by the successful experiences of public health agencies in the employment of community health aides to help reach program or agency goals (*14–21*). Agencies have hired community residents to perform program-related tasks because they, as part of the target population, understand their environment, lifestyles, attitudes, and beliefs. Consequently, community residents are more likely to be trusted and to be able to establish better rapport than an outside professional worker or health care provider. As Heath and Pelz point out, "aides with jobs in health agencies usually know more about . . . the group the agency is trying to reach than anyone else since they belong to it" (*22*).

The basic rationale for using community residents as research interviewers was that racially matched nonprofessional residents could more effectively collect information about families' experiences in dealing with dental care delivery systems by eliciting perceptions which might not be shared readily with professionals. Participation of community residents in community self-surveys and in a variety of capacities within health service centers and on advisory councils of community, State, and national agencies and programs is now common practice and has been well documented. Their employment in research efforts requiring systematic data collection procedures, however, has not been as extensive nor as well documented. One effort to translate the customary program role of the community health aide into a research role is reported by Kegeles (*23,24*), who hired indigenous workers to participate in a research project in an urban ghetto. He describes the numerous complications and problems he experienced in the recruitment, employment, and retention of seven community workers—conditions which seriously threatened his research project but which were virtually eliminated in this project.

Procedures

Selection of a community coordinator. It is often assumed that supervision of community workers should be carried out by persons holding advanced degrees (*25–27*), although it is generally acknowledged that professionals often have difficulty understanding and adapting to the needs, perceptions, and operating styles of nonprofessionals (*28*). To avoid some of the pitfalls that Kegeles had faced (*23*), we decided to employ a nonprofessional community worker whose role would be to (*a*) counsel the investigators about procedures she considered important in terms of selecting and training the interviewers, (*b*) provide feedback to the investigators when the interviewing was underway, and (*c*) supervise the interviewers in terms of daily guidance and support. The "community coordinator" was employed part time, approximately 10–15 hours a week at $4.50 an hour. In Kegeles' study (*24*), a community worker was not employed to serve in such an advisory and supervisory role.

The community coordinator was a married woman with four children and was known to a member of the research team. She had 6 years of experience with Office of Economic Opportunity programs, beginning as a neighborhood development aide for a citizen's community center and later becoming supervisor of the homemaker aides for the same center. Although she had no formal training, she ultimately became director of the entire center, a position previously held only by professionals. During her years of experience, she

demonstrated keen administrative skills and an ability to interact with professionals as well as with the community aides and the OEO target population. She clearly had the best interests of the target population always in mind, was committed to the need for improvement of social conditions, and was trusted and well-liked by the people in the community and the agency professionals who worked with her. She was known as an effective, responsible, and reliable person. The people in the community and those she supervised had confidence in her, believed her when she said something needed to be done, and they accepted it when she said how she thought it should be done.

During the 8 weeks lead-in time before the interviewer training and the actual data collection began, the investigators spent approximately 5–8 hours each week with the coordinator to explain the goals and rationale of the project and to gain her commitment. All of her questions about the research goals and objectives and the research procedures to be followed were answered. Part of her job was to understand fully the research objectives of the study and then to interpret and legitimize these goals for the interviewers.

Selection of interviewers. When the community coordinator fully understood the design of the research and the rationale for the types of information that would be needed from the study families, it was agreed that she, rather than the project directors, would select the interviewers. She agreed that all interviewers should be community residents, and that all should be racially matched with the children and parents to be interviewed—all of whom were white. All but 1 of the 14 interviewers employed were personally known to the community coordinator. In fact, most of the interviewers had worked at least for a time for the coordinator as neighborhod development aides for the OEO citizens community centers. All were women, 20 to 62 years old, and all were committed to understanding and helping people. "Good with people, reliable, interested and committed," is the way each woman was described by the community coordinator. She felt that each "could be counted on to do a good job and to do whatever was expected of her if she took the job." The community coordinator believed that her personal knowledge of the interviewers and their previous work experience definitely had a bearing on their performance, since their work reputations with her were important.

By the time the study began in 1970, funds had been discontinued for many of the local OEO programs; therefore persons with valuable work experience were available for employment. Other types of work experience also were represented in the interviewer group—former resident director of an OEO Headstart Program, children's day care worker, former elementary school teacher, teacher's aide, social work aide, and homemaker. Most had children or had cared for children at some time. All but two would have been considered poor or near poor by OEO guidelines at that time. Several were widows living on social security, others were divorced with only child-support income, and the remaining women were married, with relatively low family incomes.

To recruit employees for his study, Kegeles (*23*) relied upon referral mechanisms through an OEO program specifically designed to employ previously unemployable persons. He described his original screening of 75 women and the eventual elimination of all but 3 of them from his study because of "a series of misadventures." In his experience, "as much time was spent in personnel administration as in research administration of the study." The kinds of problems he describes were almost eliminated in our endeavor because of the role taken by the community coordinator in the selection of the interviewers. Her personal knowledge of each woman's previous employment performance gave her confidence that all indeed would do the job, do it as instructed, and follow through to completion of their assignments.

Training the Interviewers

A variety of techniques was used during the training for the child interviews. Several days were allowed for workers simply to become familiar with the research objectives and the types of information to be collected from the children. The investigators, with the help of the community coordinator, conducted the training sessions which were held on the university campus where audiovisual equipment was available. Video tapes of the investigators conducting interviews with children regarding eating patterns and oral hygiene practices were shown and discussed. When there were questions, the machine was stopped and the tape replayed. Often the trainees had suggestions for how the interview with the child could have been conducted more effectively. The use of probing questions was stressed, and emphasis was placed upon taking enough time to make the child feel comfortable, so that he or she would not perceive the interview as a "test" or "check-up."

Role playing was used during the group training sessions, and as a result the child interview instrument was redesigned to make it simpler. Each day the trainees took home at least two extra copies of the instrument with instructions to pretest it with children of friends or relatives and to bring these to the next meeting for discussion. At the meeting following, each interviewer presented her "cases," which were then discussed and reviewed for 3 to 4 hours each day for 2 weeks. This process allowed the trainees to become familiar with the interview schedule and provided a valuable exchange of ideas on ways in which the questions could be rephrased to obtain needed information. The final interview instrument was structured rather than open ended.

The final step in the training process for the child interviewing phase was a visit to a school to interview children who were not in the study sample. Each interviewer conducted three interviews. The group discussed each interview following its completion. By the time the interviews began with children in the study sample, the interviewers were familiar with the content of the instrument and had gained skills in obtaining the needed information.

To check interviewer reliability, all interviewers watched and coded a video tape of a child being interviewed, using the final form of the study interview schedule. The interviewers reached perfect agreement when these interview schedules were coded. Since the interviewers were coding a video-taped interview conducted by one of the investigators, their perfect reliability was partially an artifact of the situation. Variation in the use of probes and the rephrasing of some questions in the schedule during an actual interview would presumably result in less than perfect reliability.

The training for those who conducted the parent interviews was similar to the training for interviewers who worked with the children. However, a great deal more time and pretesting went into this effort. The six most interested and effective workers during the child interviews were retained to continue with the parent interviewing because of their knowledge of the study and their experience. The group assisted in developing and revising the parent interview instrument during the 3-week training period, meeting every other day for 4 or 5 hours. As a result, certain questions, the sequence of the questions, and the phrasing of the questions were modified a number of times. Each revision contributed to a better instrument, and one with which the interviewers became more and more familiar. Role playing and the pretesting process with friends and neighbors were again used and discussed at the following meeting.

Supervision

Child interviews. The child interviews were conducted for about 3 weeks, including return trips to schools to interview children who previously had been absent. The research investigators were at the schools during all of the child interviewing sessions primarily to provide transportation for the interviewers and to deal with school personnel. However, the community coordinator maintained her general supervisory role even though she was not "on location" at this time. The interviewers contacted her after work to express concerns or discuss problems, and she, in turn, would call one of the investigators if any major decisions were required. Questions of payment, transportation, absenteeism, and interviewers' concerns were handled in this way. On several occasions the coordinator met with the interviewers as a group to gain feedback, give encouragement, answer questions, and to maintain morale and interest.

Parent interviews. The investigators wrote to the parents to alert them about forthcoming interviews before the interviewers visited the home; this was done for both phases of the parent interviews. The interviewers were given letters of introduction and identification. If no one was at home, they left a printed card explaining that they had come by, and that they would return later. Parents were not telephoned in advance, because it was believed that fewer refusals would result if the interviewers' initial contact was a personal one. In some instances, after numerous unsuccessful attempts to reach parents at home, the interviewers had to telephone them to make an appointment. Working mothers were interviewed during evening hours and on weekends.

The community coordinator handled the daily supervision during the parent interviewing phases. The interviewers collected their assignments at the coordinator's house and returned their completed interviews to her. She then reviewed each completed schedule with the interviewer, making certain that all of the information was complete. Often she wrote additional information on the back of the form, as reported verbally by the interviewer, to help the investigators interpret the family situation or the interview setting. The community coordinator met with the entire group twice a week to discuss, share, and alleviate problems, to emphasize the importance of the information they were gaining, and as she put it, "to constantly build and rebuild their confidence." During both phases of the parent interviewing, the interviewers were encouraged to be persuasive and persistent. The coordinator continually stressed the importance of quality rather than quantity in completing the parent interviews. These gatherings were held either at her home or some other informal community location where the interviewers could relax and talk freely about their experiences.

Payment. The interviewers were paid $3 per hour. An important decision, made at the suggestion of the community coordinator, was to pay all of the women exactly the same amount per hour, although sometimes they were asked to perform different tasks. For example, during the child interviewing at schools, some workers escorted children to and from the classrooms to minimize disruption of school routine. The investigators had initially assumed that persons who would perform the more complex task of interviewing would be paid more than persons performing the escort functions. The coordinator, however, believed that the workers' time away from home was the essential factor, and that all should be paid the same regardless of the complexity of tasks to be performed because all had initially been trained to interview. This decision appeared to enhance cooperation and also to prevent loss of morale through competition for higher pay.

The rationale for paying the interviewers on an hourly basis rather than for each interview was that if

they were paid by interview they might be inclined to place priority on the number of interviews completed, thereby possibly sacrificing quality and persistence. Payment was made for time spent in training, transportation, waiting for children to be released from classrooms, as well as for repeated attempts to reach parents who were not at home. The rate of pay remained the same for all persons engaged in each of the interviewing phases of the study. It is estimated that each of the completed child interviews cost approximately $3–$4.50 for the interviewers, not including the cost of transportation or the study administration. The cost for each completed parent interview amounted to approximately $10 at the time of the study in 1970–72.

Transportation. During the child interviews, timing was essential for coordination with school and teacher schedules. Therefore, it was important that everyone arrive at school at the same time. University cars were used to transport the interviewers. They met at pickup points in three convenient parts of the city. For the parent-interviewing phases, interviewers were responsible for their own transportation but were paid an additional 60 cents per day.

Strategies and Problems

Role of the community coordinator. The strategy of employing a person in the role of community coordinator was considered crucial to the successful use of community residents as research interviewers. Basically, the community coordinator was a valuable consultant to both the interviewers and the research investigators. The rationale for employing her to assist in the training and to provide daily supervision was that she, with the trust and confidence of the interviewers and with a good understanding of the research goals and procedures, would be more effective in maintaining their productivity and morale than a professional supervisor. The interviewers' trust and confidence in the coordinator, stemming mostly from their prior work experience with her, were critical factors in determining their cooperation and the quality of work performed and contributed to the low turnover in personnel.

Throughout the 2-year project, the research investigators spent many hours with the community coordinator discussing the data collection procedures, problems, and the research rationale. These hours proved invaluable, because in times of stress, or when communication problems arose, the coordinator functioned effectively as a liaison to reinforce the legitimacy of the research goals and the importance of the specific research procedures required and to answer the interviewers' questions.

Training and content of the interview instruments. Although the procedure of engaging the interviewers in the actual development of the interview schedules during the training periods was time consuming, this participation enhanced the interviewers' interest and commitment to obtaining all of the required data. Few questions arose about the content of the children's interview. For the parent interview, however, workers had major reservations about the need to obtain information from each family on income, occupation of the head of the household, levels of education attained by each of the parents—information which the interviewers regarded as personal, but which was essential for the data analysis. They expressed their concern with questions of their own: Why do you need to know that? What does all that have to do with teeth? What does the father's occupation have to do with a child's teeth? What if the father doesn't live there? Why do you need to know how much money they make? What if the mother is on welfare?

After the community coordinator discussed the rationale for these questions and explained that the information would be reported only in aggregate form, the interviewers realized that although much of the information sought was highly personal, it would be kept confidential, and that it was important to the understanding of factors affecting the use of dental services.

Some of the interviewers said that they felt uncomfortable asking for such information, even though they understood the rationale. However, they were willing to ask for the information indirectly by using cards that listed ranges of income and educational levels, so that the respondents could identify these areas by letter. The interviewer then recorded the letter without having to discuss dollar figures or educational grade levels.

To allay a concern of the interviewers as to whether their efforts would make dental care more accessible to children and their families, the community coordinator explained that the purpose of the research project was to collect information systematically and that if, improvements were needed, appropriate persons in the community could use the information to bring about the necessary changes. This explanation seemed to satisfy the interviewers concerning the usefulness of their efforts.

Supervision. The importance of the community coordinator's daily supervisory role is illustrated by an example of a situation that arose during the child interviews. With interviewing well underway, one worker, reacting to responses given by a child she had interviewed, began to spread the rumor that "The children aren't telling the truth." Although the research investigators were "on location" at the school, only the community coordinator was told about the problem. After learning about the situation from the community coordinator that evening, the investigators met with the group the next day to emphasize the importance of establishing rapport with the children and probing and

rephrasing questions until they were satisfied that the child was responding candidly.

Much of the community coordinator's time was spent in meeting with the interviewers, individually and in groups, most often in the evening during the parent interviews. She believed this process was essential because it gave her an opportunity to reinforce much of what had been discussed during the training period. She advised the interviewers not to "make it a question and answer session, but rather, a conversation. Help the parents realize how important their participation is to the success of the study. Only they can help you to learn about the problems they may have experienced in obtaining dental care. You must make them feel that what they are sharing with you is important. Be sure to gain their confidence before asking the more personal questions."

The interviewers became frustrated when they had difficulty reaching some of the parents at home. Sometimes as many as 10 or more visits had to be made before information could be obtained. Occasionally this process engendered a feeling that "it just can't be worth all this just to talk with this one family," as well as some guilt feelings that they might be "wasting time." The community coordinator, however, convinced the interviewers that the hardest to reach families might be the most important ones in shedding light on barriers that families face in obtaining needed dental treatment.

As the interviewers gained experience, they shared suggestions with each other about the interviewing process. Often an interviewer would think that she was the only one having trouble obtaining answers to particular questions or encountering difficulty finding a parent at home. But when they learned that all were experiencing the same kinds of situations, the interviewers became more confident about overcoming the problems. The more involved the interviewers became, the more determined they were to complete an interview, regardless of how many visits were necessary or how long the interview took.

Personal problems. Financial and family difficulties headed the list of personal problems of some of the interviewers. The community coordinator was instrumental in helping in these instances so that the problems did not interfere with the interviewers' performance of their job.

Transportation. Since university cars were used to provide transportation during the child interviews, no problems with transportation arose per se. However, when drivers were late, the waiting interviewers lost pay. This situation was corrected when it was decided to pay the interviewers from the time they were due at the pickup point.

During both phases of parent interviewing, when interviewers were responsible for their own transportation, too few cars did pose a problem. Working in teams was one solution. Some interviewers tried buses, but they found this frustrating if they could find none of their assigned families at home in a particular neighborhood.

Lack of regularity of payment. A major difficulty was the irregularity of payments to the interviewers. Because they were not part of the regular university payroll, and because they did not work a set number of hours daily or weekly, it was virtually impossible to pay them on a regular basis. An attempt was made to set up the reporting of hours and the payments schedule systematically every 2 weeks. Still, the checks often were late coming from the employing institution's business office. Regularity of payment was important to the interviewers because, with their limited financial resources (social security, child support, and so on), they needed their checks on time.

Data collection versus action roles. Early in the training period for the first phase of parent interviews, the trainees asked what information the study would provide parents about dental health and the importance of dental care. It was explained that the only information that parents were to receive as part of the research design was notification of their children's need for treatment. The interviewers felt that explanations of the importance of dental care should not be "withheld from the parents," they wanted to be able to give parents this information. To avoid the problems that Kegeles (*23,24*) had experienced with his workers unsystematically giving out varying health messages and to control the content of the messages that families would receive, the investigators agreed that the interviewers could leave a factual dental health pamphlet with each family following the interview. To insure that all families in the study had equal access to this information, copies of the same pamphlet were mailed to families that were to receive the mail questionnaire.

Phase 2 of the parent interviewing entailed talking with parents of children who had been found a year earlier to be in need of dental treatment. The second dental examinations showed that half of these children had not received all the care they needed (*10*). The interviewers felt frustrated during this phase, and they wanted to take a more active role in obtaining treatment for these children. Originally, the intent was for the workers to assist families who had been unable to obtain treatment for their children, as well as to document the barriers that families faced. The workers were influential in obtaining treatment for some of the children and in a few cases for entire families. In many instances, however, neither the community workers nor the investigators could help families overcome such unsurmountable barriers as waiting lists for overcrowded community resources, apparent financial ineligibility for low-cost dental services, or community clinics closed during the summer (*10*).

Parent responses to interviewers. As pointed out earlier, parents were informed by mail that an interviewer would soon be visiting them. Often, however, the letters apparently were not received or were not read. In such cases, the interviewer needed to be especially persuasive in explaining her purpose and how important it was for her to complete the interview.

The interviewers met strong parental resistance only when they were perceived to be from the school district, "checking up on them." But when the interviewer was allowed to explain her role, most of the parents became cooperative and willing to share a great deal about their experience with dental care. In fact, the interviewers reported that they were astounded, particularly during the second phase of parent interviewing, by the interest and willingness of people to talk about their dental health and dental care experiences. Similarly, the interviewers reported that many parents were surprised that anyone would be sufficiently interested in their dental experiences and attitudes to come to their home and discuss the problem with them. The interviewers encountered total disinterest or rudeness in only a few instances. In several instances the interviewers became aware of critical family situations that required additional help. With the guidance of the community coordinator and the local information and referral service, the interviewers referred these parents to appropriate sources of assistance.

Side Effects

The community resident interviewers were effective and successful in obtaining information on perceptions of health care delivery—information which generally is inaccessible. While the purpose of the use of the community resident coordinator and interviewers in this study was not to provide methodological comparisons of the procedures used with any other standard research procedures or data relating to cost effectiveness, the success experienced in this project certainly points to the need for such methodological research and documentation.

Both the community coordinator and the interviewers developed a strong interest for improvements in the delivery of dental care. They were surprised to learn that many of the families interviewed appeared to have similar problems and attitudes relating not only to the financial aspects of dental care, but also to its availability, accessibility, and acceptability. Before their involvement in this project, most of the interviewers were interested in improvements in social and economic conditions—housing, employment, and social services. But they said they had not been aware of the need for improvements in the delivery of dental care services because they had "not thought about it that much." By the time the project was completed, the interviewers had heard such needs expressed by many of the study families. The significance of this outcome has been alluded to by Riessman (*29*), who believes that the indigenous nonprofessional health worker's knowledge, ability to communicate, and commitment to people in the community can be valuable in helping to bring about measures leading to improved health, social, and economic conditions. He goes on to state that "In fact, already existing commitments can be deepened by new systematic understanding regarding the nature of poverty." Through participation in systematic data collection, the interviewers became more conscious of factors other than financial which kept families from obtaining dental care, and they became convinced of the need for improved delivery of dental services.

Summary and Conclusion

Nonprofessional community residents were employed to interview children and their parents as part of a research project designed to study the relationships between family characteristics and children's dental conditions. The research design made it possible to obtain comparable information about children and their families who, within 1 year, did receive treatment for carious lesions on permanent teeth and those who did not (a population subgroup often bypassed in assessment of the process of health care delivery).

The key to the selection, training, and supervision of the interviewers was the employment of a nonprofessional, community resident coordinator to whom the interviewers were directly responsible. The rationale for her employment to assist in training and to provide daily supervision was that such a person, having the trust and confidence of the interviewers—given a good understanding of the research goals and procedures—would be more effective in direct supervision of the interviewers than a professional supervisor. The supervisory role of the community coordinator, which included interpreting and legitimizing research goals and procedures of the study, led to the maintenance of interest, commitment, morale, and productivity.

The rationale for using community residents as research interviewers to systematically collect data on consumer perceptions of dental care delivery was that racially matched trained residents might be more effective in obtaining—especially from low-income and minority ethnic groups—sensitive information that might not ordinarily be shared with health professionals, professional interviewers, or graduate students.

While the implementation of the approach was not without problems—questions of legitimacy, transportation, personal troubles—the resident interviewers were effective and persistent in collecting valuable information concerning consumer perceptions of health care delivery. At the same time they were able to maintain the interest, candor, and cooperation of the study respondents. The interviewers found that most of the parents were willing to share their experiences about their use or nonuse of dental services.

Examples of the types of information obtained by the interviewers from the study families appear in other

papers (*4,6,7,9–12*). The research design and the employment of the community coordinator and racially matched interviewers described here have since been duplicated on a smaller scale and inner-city white, native American, and black families in the same community. In that study, the role of the community worker was extended to include obtaining informed consent from parents before family participation in the study. Obtaining informed consent for the protection of human subjects has become an essential prelude to the implementation of social science as well as other types of research. The employment of racially matched community residents was found to facilitate subject participation through increased understanding of the research goals and risks.

Indigenous community persons, selected for their reliability, interest, and commitment, with the assistance of a resident "coordinator," represent a potential source of interviewing manpower to systematically gather information on consumer perceptions of the processes of health care delivery—information which ordinarily might be inaccessible but which, according to Donabedian (*2*), should be included in the appraisal of community health care resources.

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