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# Combining Sociology with Epidemiology: Community-Oriented Primary Care in a Rural Mountain County

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*Thomas Plaut  
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## ABSTRACT

Community-Oriented Primary Care (COPC) focuses attention on the community as “patient” and involves its residents in a process of discernment of health needs and consequent action. COPC’s emphasis on community involvement provides an opportunity for the sociologist to create the tools for resident participation in health needs assessment and subsequent interventions. This paper describes sociology’s role in a rural Appalachian county COPC program funded by the W. K. Kellogg Foundation. Some 41 focus group interviews were employed to reach more than 416 residents. Interview results were combined with epidemiological and census data and fed back to a 27-member Community Advisory Board, where nominal group techniques were used to develop a prioritized list of needs and consequent interventions. Two interventions began in the fall of 1990. One is a dental sealant program for schoolchildren. The second involves training “lay community advisors” to work with parents of newborn children in efforts to improve infant health and parenting.

In July 1989, a four-year Community-Oriented Primary Care (COPC) project was initiated by a multiple-agency consortium in Madison County, a rural mountain county with limited economic resources in western, Appalachian North Carolina. COPC focuses on the community as “patient” and involves its residents in a process of discernment of health needs and consequent action. As part of a “community assessment,” which included a review of census and epidemiological data, a research team made up of an epidemiologist (Landis), a community organizer (Trevor) and a sociologist (Plaut), conducted forty-one focus group interviews between August and December. This paper describes

the role focus groups played in the community assessment and in the overall development of the project.

### The Theory of Community-Oriented Primary Care

COPC takes a geographic area—in this case Madison County—and treats it as a physician would treat an individual patient. The entire health delivery system is analogous to the physician in a one-on-one encounter. The community's perception of health needs is similar to the patient's chief complaint to the doctor. Epidemiological analysis of morbidity and mortality plays the role of a physical examination and patient history in defining medically related problems and needs. Community action and interventions parallel patient treatment. Monitoring the impacts of the interventions parallels individual diagnostic testing. Continuous modification and development of interventions is similar to the individual patient's receiving adjusted care during follow-up visits to the physician (see Table 1).

Table 1  
COPC Compared to Clinical Care

COPC	CLINICAL CARE
1. A community/defined population	The patient
2. A health delivery system	Doctor or other practitioner
3. Community's perceived needs	Patient's chief complaint
4. Epidemiological research	Patient physical exam and laboratory tests
5. Identifying and prioritizing community health problems	The diagnosis
6. Interventions	The treatment plan
7. Monitoring of interventions	Follow-up history, physical, and diagnostic tests
8. Modification of interventions	Modification of treatment plan

Source: Henry Taylor and Carl Taylor, 1989

The community is at the core of COPC theory and practice. The community—in dialogue with medical and human services professionals—consequently plays a major role in defining needs and determining interventions. If the professionals take too strong a leadership role, they lose the community's support

and the interventions fail or their impact is greatly reduced (Maguire, 1987; Cancian and Armstead, 1990).

COPC was developed by two physicians, Sidney and Emily Kark, working among the Zulu in South Africa in the 1940s (Overall and Williamson, 1987; Trostle, 1986). Their methodology of community care involved four stages:

1. Identifying the community—meaning the total population, not just users of the medical center. Study of the community included an analysis of its social structure and patterns of relationships, traditional healing methods, economy and economic need, nutrition, etc.
2. Identifying community health problems
3. Involving the community in determining priorities in health needs
4. Constant monitoring of interventions to evaluate effectiveness and make modifications on a continuing basis.

In South Africa, the Karks and COPC ran afoul of apartheid in 1957; white physicians were no longer allowed to treat black patients. Sidney Kark was invited to chair the Department of Epidemiology at the University of North Carolina at Chapel Hill, joining former Polela colleague John Cassel, who had come there in 1954 on a Rockefeller Foundation grant (Trostle, 1986:67). The idea of COPC in the United States spread from UNC to Duke University, UCLA and Harvard . . . and eventually to Madison County.

Located along North Carolina's mountainous border with Tennessee, Madison County consists of an area of 456 square miles, with a population of 17,162 living in some 5,500 households. Madison is part of the 397-county federally designated Appalachian Region. The term "Appalachian" implies a cultural tradition which emphasizes family, community and self-sufficiency, tied paradoxically to a century of economic disintegration and crisis (Eller, 1982). Forty percent of its elderly live below the poverty line as do more than 38 percent of its 4,161 children under the age of eighteen (N.C. Department of Environment, Health and Natural Resources, 1988).

The population is relatively homogeneous. It is virtually all (98.9%) white and rural (79%). Almost half of its labor force is employed in agriculture. Of its 17,500 people, some 3,600 live in small towns: 800 in the county seat of Marshall, 700 in a turn-of-century resort town called Hot Springs (where the warm spring-fed baths are currently being repaired for use after many years of abandonment), and 2,100 in the college town of Mars Hill.

Historically, Madison has been a county of family farms where burley tobacco has been the major cash crop. But in the 1980s, major tobacco companies turned to cheaper overseas suppliers, while demand for tobacco also

dropped. The number of farms in the county decreased 11.8 percent between 1982 and 1987. Of the remaining 1,305 farms, 1,142 (87.5%) had incomes less than \$10,000, indicating that, for most people, farming has become a second source of revenue behind "public work" in commerce, industry and government. Whatever the source, per capita income is low at \$9,261 in 1987, 59.8 percent of the national \$15,484 average. Madison ranks 98th in per capita income among North Carolina's 100 counties (N.C. Bureau of Economic Analysis, 1989). The county's isolated and mountainous terrain has seriously limited the development of a manufacturing industry and it "took a pummeling in 1986 when a shoe factory closed, with 435 jobs lost—nearly 40 percent of the county's total" (McCarthy, 1990).

The consequent lack of economic opportunity has led to the flight of the working-age population leaving a higher percentage (14.4%) of people over sixty-five (the state average is 10.2%). Of the 2,426 elderly registered in the 1980 Census, 40.8 percent were living below the poverty level.

Isolation and distance from services and employment have a significant impact on the lives and opportunities of residents. When the county's eight townships were ranked on a scale of 1 (close to jobs, services and the high school and college) to 4 (most distant from them), it appears that the more remote the township, the more likely its residents are to have an income below the poverty level ( $r^2 = .797$ ) (N.C. State Data Center, 1980). Problems of isolation and the lack of transportation—to schools, doctors, etc.—were mentioned repeatedly in group interviews that reached more than 400 county residents in the fall of 1989.

The county death rate in 1986 was 9.04, compared to a state rate of 8.62. Heart disease was the leading cause of death and had a rate of 317 per 100,000; the state rate was 306. Similar high county mortality rates are seen for cancer, cerebrovascular disease, diabetes mellitus, and pulmonary disease (N.C. Division of Statistics, 1989). However, since these rates are not 25 percent above or below state averages and are based on very small numbers, the county rates are not considered significantly different from those of the state. On the other hand, data on dental caries (27% to 63% of K-8 students in the county's eight schools) indicate a serious need for dental hygiene and preventive care.

The county's annual child abuse rate, as reported by the North Carolina Department of Human Resources, Division of Social Services, for the years 1985–1988, proved to be a cause for concern. The abuse report rate per 1000 for the entire state averaged 5.7 to 5.9. The range in Madison County was 8 to 10. Neighboring counties Yancey and Mitchell, with similar socioeconomic and demographic characteristics, had rates of 3 per 1000. Madison's substantiated abuse rate was also higher. Research staff discussions with teachers, social

workers and scout leaders confirmed these findings (see focus group comments on children).

In sum, Madison County is a rural county where cultural tradition emphasizes family and community, but it has a troubled economy and a number of people stressed by poverty and limited economic opportunity. It shares the contradictory Appalachian heritage of environmental beauty and destruction, and of struggles for self sufficiency, independence, and dignity in the face of a disintegrating economy.

### **Making Changes: Community Development and Health Care in Madison**

People have been attracted to Madison County by both its needs and beauty. In the late 1960s, two nurses traveling through the Hot Springs area conducting a "health fair" screening program were sufficiently impressed to return in 1971 to look into the possibility of organizing a home nursing service. They established a small clinic in Hot Springs with the assistance of a doctor located some 45 miles away in the city of Asheville. The nurses obtained federal funds the following year, hired more staff and established two other small clinics in the nearby communities of Walnut and Laurel. Today, the Hot Springs Health Program has four medical centers staffed by six physicians, two family nurse practitioners, a dentist, a pharmacist, and ten nurses. It provides a range of hospice, home health nursing, clinical, dental, and pharmaceutical services. It also provides home chore services for the developmentally disabled, and physician and midlevel support for the county health department, the college infirmary, and two nursing homes. Its physicians also serve as county medical examiners. Its staff logs some 36,000 patient encounters annually.

The county's ability to organize its limited resources has been demonstrated not only in the building of four medical centers, but in the creation of a Habitat for Humanity housing program, a hospice, counseling and crisis services for battered women and victims of sexual assault, volunteer fire departments, community development clubs and a privately funded service called "Neighbors in Need," which provides funds, food and other assistance to people caught by emergencies. The networking of these organizations with public services (schools, mental health centers, emergency medical services, the county health department and the Department of Social Services) was a primary reason cited by the W. K. Kellogg Foundation for its funding of the four-year COPC project, which began in July 1989.

## **Bringing Community-Oriented Primary Care to Madison County**

### **The Idea of Community**

Community-Oriented Primary Care begins with the community assessment, a task co-directed in the Madison County project by an epidemiologist and a sociologist who had worked in the county for over a decade. The first goal of the assessment was to understand what people in Madison County meant by the word "community." The county's three postmasters were asked to map communities within their zip code areas. Their maps were then validated and refined by other informants from various parts of the county. Communities turned out to be small units based on traditional kinship ties and land holdings. Some seventy-two units were identified, along with 350 "community helpers" (defined as people whom residents of a specific community would call if they needed advice or assistance).

The discovery of seventy-two subjectively defined communities emphasized that, for many residents, the county is not a single, viable entity as much as the traditional, kinship-based neighborhood of the mountain "cove" (Eller, 1982). The strong identification with local "place" and relationships would limit COPC community-based interventions: specific communities and their own trusted networks and organizations would become the basis for "community action." (This insight helped shape the development of the Laurel community "Parent Team" intervention described below.)

### **Means of Assessment: The Focus Group**

The Executive Board for the COPC Project includes representatives of the Mountain Area Health Education Foundation (located in Asheville and related to the Schools of Medicine and Public Health at the University of North Carolina at Chapel Hill), and county residents associated with the Hot Springs Health Program and Mars Hill College. One of the county residents insisted that surveys *not* be employed in the community assessment. "These people have been surveyed to death," he said. "They're tired of being asked if they're poor."

The community assessment team consequently turned to focus group methodology. Focus groups had previously been employed to evaluate Hot Springs Health Program staff relationships (Plaut, 1988). The COPC project required the adaptation of focus group methodology to local conditions and project goals. The fragmentation of the county by its mountainous geography, its seventy-two communities and its various agencies and schools required more than the recommended three to eight groups. The project goal of community-based change

required that as many viable county groups as possible be included. Consequently, forty-one focus groups were set up to reach service providers: doctors, home health nurses, mental health therapists, school teachers, emergency medical technicians, extension agents, senior meal site operators, child day care providers, etc., and all viable community groups, including volunteer fire departments, community development clubs, scout leaders, and Parent-Teacher Associations.

The focus groups were conducted between August and December 1989, involving 416 county residents. The setting for each group was its own "turf," be it a school, a fire department garage, church or an office.

### **Using Focus Groups In The Madison County COPC Project**

Ideally, focus groups are made up of seven to ten participants having similar social locations, values and worldviews. The discussion is led by a facilitator, who has a specific agenda or series of questions. Sessions last from one to three hours and are often audiotaped for later content analysis (Basch, 1987; Krueger, 1988; Morgan, 1988, 1990). Given the technical difficulties presented by some interview sites in Madison County and the discomfort created by the initial uncertainty of some groups about the nature of the project, audiotaping was ruled out and a two-person interview team was used. It usually consisted of a man and a woman who alternated the roles of facilitating and note taking, depending on the nature of the group. (For example, it proved more effective to have a male facilitating a discussion in a working class, virtually all-male volunteer fire department.) The questions presented to each of the forty-one groups were:

1. What personal health problems or physical complaints appear to be most commonly mentioned by people in the community?
2. What barriers to health care or medically related issues do people in the community talk about?
3. What, in this group's opinion, are the serious health problems in the county? What are the causes of these serious health problems? What in this group's opinion are the serious barriers to health care?
4. What needs to be done to handle these problems?
5. Do you feel that there is any group of the population not receiving adequate medical care? Why not?
6. Who do people call in this community when they need help or advice? (This question was asked only in community groups, such as volunteer fire departments and community development clubs.)



Focus group participants were given a copy of the questions to provide an opportunity for individual written responses. This proved significant in cases where a respondent noted either an issue passed over in the discussion or something he or she felt was too sensitive to be mentioned in the group.

Each focus group session was written up in narrative form by both facilitators within twenty-four hours. These accounts were then compared and consolidated into a single report. The reports were subjected to a content analysis to transform the qualitative data into a quantified form. Some 230 diseases, causes of pathology, perceived barriers to health care, etc., were coded on a scale of 0 to 2, with "0" meaning no mention of a particular topic, "1" indicating that the issue had been raised but did not have the full consensus of the group (which enabled the entry of written as well as verbal responses), and "2" indicating apparent consensus. ("Apparent consensus" is obviously a soft measure. If the topic at hand was at all controversial or if any hesitancy was evident, the facilitator asked, "Does everybody agree about this?" In the several incidences of individual written or verbal reservations, the score was reduced to a 1.)

### Focus Group Results

The variable scores were totaled and then ranked by score. The *complaints most heard in the community* were pain, which was associated with arthritis/rheumatism and backache, allergies and heart disease. The focus groups cited diseases related to aging and the frail elderly (Alzheimer's disease, circulatory problems, cardiovascular disease and "just getting old") at the top of their list of "serious health problems" in the county.

The biggest single vote-getter in the *focus groups' views of serious illness* was alcohol abuse. This was a surprise to the facilitators, who had not seen its significance in their own notes; the quantitative analysis revealed consistency in the perception of the alcohol problem in all but the community-based groups. (Loyalty to community, the taboo against alcohol in fundamentalist religion, concern over family embarrassment and privacy, and/or fear of recrimination are believed to have prevented the alcohol issue from being raised in the ten community-based groups.)

Stress-related symptoms such as headaches and stomachaches were ranked second to alcohol. A number of informants talked about the stress felt by farmers, who must produce to make payments on farm equipment and land taxes before they can provide food, shelter, and medical care for their families. The harsh demands of life for many county residents caused depression to be scored within the top five ranked health problems. Teachers said that family problems caused stress-related illness among children and depression, especially among

high school students who see little opportunity after graduation: “They want to stay in the area, but have to leave if they are going to find jobs.”

Lack of preventive health care, care of self in the early stages of an illness or injury, poor diet and poor parenting, hygiene, and abuse and neglect ranked highest on the *causes of health problems* list. A number of informants talked about damage being done to the family and especially to children by both parents working. Many families now are single-parent families, causing even greater financial and emotional stress. Focus groups with elementary school teachers provided insights on what appears to be an eroding family system and its impacts on children:

In one class, every child was from a broken home. Kids from single-parent households have the greatest behavioral problems: fighting, pinching, biting, hyperactivity.

The stress comes from just trying to survive. They [the children] are always hearing about how hard it is to get by from their parents. Many [children] work in the tobacco fields and in tomatoes.

The kids don't sleep at night. They just come in and put their heads down on the desk—and we let them sleep. They can't learn anything when they're that tired. We just let them sleep. Some of them stay up because they're working—in tobacco in the evening or digging night crawlers to sell to tourists.

Some stay up all night watching television. There's nobody there to set limits . . . nobody there to parent.

The kids come to school tired. They're not getting breakfast. Ninety percent of the parents told me that if their kids got breakfast, they got it at school.

Many kids are unsupervised in the afternoons and evenings. Sometimes it's because the parents work the third shift.

Some children as young as the third grade are preparing their own meals.

Some as young as the third grade get up themselves and then have to dress and feed their younger brothers and sisters before school.

Kids are affected by alcohol abuse—both in terms of witnessing heavy drinking and by being victims or witnesses of physical abuse accompanied by drinking.

The kids get knocked around at home, so they do it to each other at school.

We cannot do as much teaching now as we did ten years ago—we spend much more time now in counseling students and in trying to control their behavior.

Poor parenting was felt to have serious impacts on children's health:

Fifty percent of the kids at this school do not get taken to the doctor.

Mothers work now. They send sick kids to school. Single parents can't afford to lose a day's work and stay home with a sick child.

Fifteen out of the twenty-five kids in my classroom have never seen a dentist.

One boy has a large cavity in a front tooth and he always tries to hide it by holding his lip down over his tooth.

In my first ten years, I never made a report to the Department of Social Services for suspected abuse. Now we have to report four or five cases every year in this one school alone.

The teachers' comments relating to abuse were echoed by other groups. Scout leaders said:

Single parents and young parents are causing a lot of abuse, especially these young mothers—babies having babies.

Of the 250 Girl Scouts in our troops we referred 16 to Protective Services last year.

A Department of Social Services Protective Services worker reported:

N came to me and said "Now, you know J's a good fellow and doesn't mean any harm. You know this morning he's praying with his children. He really loves them." I said, "You should have been there last night when he was pointing his shotgun at his wife and me and his kids had run off to hide in the woods."

Comments by teachers as well as by other focus groups played a major role in a Community Advisory Board decision to create the COPC “Parent Team” described below.

The economics of medical care topped the list of *perceived barriers to health care*. The high costs of visits to medical facilities, especially for people on fixed incomes, the costs of medicines, insurance, and transportation were highly ranked. Consequently, the groups seen as not having access to adequate medical care were the elderly, working people who are unable to afford the high costs of private medical insurance and yet are ineligible for Medicaid assistance, as well as children and teenagers whose parents cannot get them to the medical centers because they can’t afford it, don’t have a car to transport them, or are at work.

Preventive health education scored highest on the groups’ ranking of *needed solutions*, followed by transportation for the elderly and for children, education on how to utilize existing health care services, preventive care, parenting and nutrition, expanded home care services for the frail elderly, and development of support groups for parents.

### **Other Sources of Data**

The focus group data was developed alongside epidemiological statistics on mortality and morbidity and on demographic, economic and social data provided by both federal and state agencies. The results of this information are evident in the previous description of the county. Perhaps the most interesting finding in the epidemiological data was that Madison County is not unusual—its overall health is no better or no worse than other American counties. What appeared to be a problem with a high rate of strokes (92.17 per 100,000 compared to a national average of 62.5) disappeared when seen in terms of “Years of Life Lost,” a measure that subtracts an age at death from 75. There were virtually no years of life lost to stroke in Madison County, indicating that people die of stroke after the age of 75. Elevated rates for deaths from diabetes indicated a need for more attention to medical care and monitoring, as well as diet. The elevated pneumonia/influenza rate (51.84 compared to a national 29 per 100,000) suggested greater attention ought to be paid to respiratory illness and preventive measures, such as regular influenza vaccinations.

It is important to note, however, that epidemiological data based on rates of illness was found to be problematic in our COPC community assessment because frequencies are so small at the community level. For example, in 1986 six people died of diabetes in Madison County. For a county of 17,500 people

the rate per 100,000 would be 34.28. If only two more people had died, the rate would have jumped to 45.7.

### **Turning the Data into Action I: Agency Responses and Interventions**

Facilitators had promised the focus groups that they would feed back complaints about services to agencies. The Hot Springs Health Program was told it needed to work on changing its image as a "poor person's clinic." This image, that stems from its early years when it received federal funds, is far from the current reality of it being a private group medical practice. The "poor person's clinic" view had also contributed to the idea that its physicians were "not good enough to be in private practice." In effect, the practice has had to deal with the history of Madison County being portrayed in the state media as poor and backward and the fact that some local residents had bought into this stereotypical view to the point where they could not believe in the quality of their own medical service. The program's administrators and physicians also were told of complaints about scheduling and long waiting periods, and "cold" receptionists at one of the four medical centers. The complaints were addressed, at least partially, by the computerization of appointment schedules and medical records. A workshop was held for the receptionists and clinical assistants, that enabled them to vent their frustrations with doctors' behaviors in a meeting with the physicians, and an ongoing biweekly meeting was established at the center to process stress and office problems.

One message from the epidemiological data, that was especially supported by the focus groups with teachers, was a high rate of dental caries among school children. Consequently, a pilot tooth sealant program was developed for all second graders (who are at the age most beneficial for such preventive care). The program was carried out on site in the schools, accompanied by an education component for both the children and their parents, complete with "before and after" questionnaires and a control group of school children in neighboring counties who did not receive sealants. In all, some 400 Madison County children and their parents will benefit from the program. Additionally, seventh graders are receiving education about fluoride and fluorosis, and efforts are being made to assist in the fluoridation of public water systems.

### **Turning the Data into Action II: Community Organization**

Before applying for the Kellogg grant, its authors had invited representatives of county agencies and organizations to luncheons to elicit their ideas and support for the COPC idea. Their enthusiasm sufficiently impressed Kellogg

grant evaluators who chose to fund the Madison project. After being funded, this group became the COPC project's Community Advisory Board or "CAB." Its regular two-and-a-half hour luncheon meetings have become a major place for networking between agencies and groups. In time, the first half hour of the meetings was devoted to informal conversation and eating—which always began with comments about how people never get to see each other and then moved into specific problems and problem-solving unrelated to the COPC effort. The COPC staff found that this informal process was necessary and had to happen before the group could effectively concentrate on COPC business. The lunches are expected to continue indefinitely, beyond the life of the project. In the language of the program, they are a very useful "unanticipated outcome."

In the winter of 1990, the project staff took the Community Advisory Board through a review of COPC theory and goals and the data gathered. Staff also outlined possible interventions, using the oral health project to explain different levels of intervention:

- Level 1: Direct interventions: Dental exams and placement of dental sealants by public health dentists and hygienists.
- Level 2: Community-based educational/preventive interventions: School-based oral health program for second graders and all parents of K-8 students. Mass media campaign targeting the community-at-large.
- Level 3: Interventions promoting changes with legislative policy makers: Support/advocacy for town water fluoridation, working with town and county governments.

(The oral health program had already been organized with Advisory Board approval but without much involvement—the need had been so obvious that the project staff, at the urging of the W. K. Kellogg Foundation, had started work with local dentists and state and county health officials to get this one intervention operating from the outset of the project.)

Following the review and education process, the board was broken down into nominal groups, each of which was asked to list the three most serious health problems in the county, the three barriers or sources contributing to these problems, groups affected by the problems, agencies already working on them and, finally, what interventions would now be appropriate. The Advisory Board decided it wanted to focus on children (the other main option being the elderly) and that, given the problems that affect children—from alcoholism to abuse and neglect—it would be most appropriate to target parents. Board members felt that interventions focusing on parents could impact indirectly but significantly on

issues such as substance abuse, poor parenting and domestic violence. Further deliberations narrowed the target to all parents of newborn babies in a pilot project area to avoid stigmatizing a specific group, such as "high risk families."

A subcommittee was established to assess extant health programs directed at children and to come up with suggestions for new interventions. The children's subcommittee, which included a physician, a hospice social worker, and staff from the Health Department, Mental Health Center and project staff, recommended a lay "Community Health Advisor" program (Service and Salber, 1979) capable of:

1. linking parents with agencies
2. supporting parents in parenting
3. getting health care workers into the communities or homes (for hard-to-reach families)
4. getting first aid and medical supplies to families
5. getting information on preventive care and local resources to families
6. getting parents to educational meetings or classes on health and parenting.
7. begin education on parenting with adolescents (to be addressed in a new health curriculum being implemented at the county high school).

A meeting with the county PTA council was followed by two additional focus groups with parents (one at the Health Department and another at a kindergarten) to both validate previous findings and broaden the support base for a parent's project. Receiving the validation it sought, the Community Advisory Board worked with a single community PTA to create a pilot "parent helper" project. The PTA selected four community women it felt could carry the project to parents of newborns. While one CAB subcommittee wrote a "Resources Guide" of services available to parents, another designed a lay helper training program and a third determined the contents of a medical kit for parents. At the same time, project staff sought Institutional Review Board approval for the project, required consent forms, etc.

The four women, who have come to call themselves the "Laurel Parents Team," were trained in the late fall of 1990. Representatives of some fifteen county agencies were involved, although most of the training was conducted by medical personnel from four agencies. A Mental Health Center therapist and the staff sociologist worked with the women on communication skills and strategies for networking. The trainees themselves provided their own definitions of what would be acceptable in their community: they revised the parents' consent form, a home safety checklist and a brochure describing their program. They went

into the field in December 1990. The continual monitoring that is integral to the COPC process will help them and the agencies behind them adjust and refine services to meet the ever-changing needs of parents and their children.

### **Conclusion: Sociology's Role in Community Development and Community-based Health Promotion**

The Madison county COPC project demonstrates a number of ways in which sociologists can contribute to community-based public health projects and, additionally, work effectively with epidemiologists and other medical service providers. The project's sociologist worked in defining, accessing, and assessing the community, designing and implementing research methodologies, facilitating community group decision-making, networking between agencies and between community-based groups and agencies, and in the training of the "Parent Team" indigenous lay health advisors. He also shared community research data with medical providers in efforts to help them improve their sensitivities and services to clients. He continues to play a role in the evaluation of the project's ongoing interventions and in facilitating the design of new ones.

The most significant contributions provided by sociology to this project appear to be:

1. The idea of community as social fact. Sociology carries unique insights into the power and nature of community (Nisbet, 1953, 1966; Stein, 1960; Warren, 1972). These insights enabled the investigation into the nature and definitions of community in Madison County which provided the framework for all that followed. In identifying and making connections with communities and with key individuals and organizations within them, the COPC staff enabled them to:

- be involved in the initial "brainstorming" that led to the grant application and to the W. K. Kellogg Foundation funding.
- define the nature of "community" in the county, which resulted in the identification of seventy-two in-county neighborhoods.
- articulate its sense and experience of illness, causes of illness, barriers to adequate health care and groups cut off from medical services in those communities (via the focus groups).
- determine possible solutions and priorities for interventions, both in focus groups and in the Community Advisory Board.
- play a central role in the design and implementation of interventions. Schools worked with dentists in the sealant program; community clubs and senior meal sites assisted the county Health Department in an Influenza Vaccination Program, and a Parent-Teacher Association took



major responsibility in organizing the Parent Team indigenous lay health advisor project.

- determine what would be or would not be acceptable to the community. These decisions impacted everything from research techniques to what consent forms families involved in the Parent Team Project would be required to sign.

In sum, a belief in the integrity of community enabled the COPC Executive Board (made up of doctors and administrators connected with the Hot Springs Health Program and the Mountain Area Health Education Foundation, and the sociologist) to surrender considerable control and let the Community Advisory Board, county agencies such as the Health Department and community groups like the Laurel PTA determine policy. The community was involved in significant ways from the beginning of the program.

2. Research methods. Where an epidemiologist seeks to evaluate community health by reference to county, state and national morbidity and mortality data, the sociologist can ask community residents about their insights into health problems. Both epidemiologists and sociologists gather data through surveys, but a growing number of sociologists are impressed by the power of "softer" sociological qualitative methods such as the focus group interview. Focus group data proved to be more useful in determining needs and policy than epidemiological data on mortality and risk behaviors.

A second point: Where research elements within both sociology and epidemiology may tend to see people as "data," sociological experience in participant observation and symbolic interactionist theory illuminate the significance and power of people's definitions of their own realities. The Madison project was grounded in community definitions of illness and barriers to good health. The consequent rapid development and acceptance of project activities are a product of their "fit" within community definitions and worldview.

3. Concepts of culture and subculture. The sociologist brought to the project knowledge gained in previous research documenting the differences between the values and world views of medical practitioners and their rural clients (Plaut, 1988). He consequently was able to advocate the legitimacy of the client point of view. The fact that local women were able to redesign home safety checklists (so they would not offend their neighbors) and project participation consent forms (whose original form contained overwhelming legal detail) indicates the degree of control given them in relation to "the Ph.D.s and doctors" responsible for program implementation and evaluation.

4. Researcher as participant. Much of the ability to conduct focus groups, the mapping and the community facilitation/organizing was due to the sociologist/

community assessment person and the project coordinator having spent more than a decade working in the county. Before the Kellogg project, the coordinator directed programs for the developmentally disabled. The sociologist helped establish a hospice program and had been both a consultant to and board member for the Hot Springs Health Program. Both had helped develop services for victims of rape. Each had earned a measure of community acceptance and trust prior to the project.

In summary, sociology played a significant role in the conceptualization, program development and implementation of the COPC project. Although medical providers, community members and the sociologist came to project with different perspectives, there came a time when they could sit back and reflect on their differences and the connection between those differences and the training provided them by their respective disciplines and life experiences. From that moment on, we seem to have been living by Hylan Lewis' dictum to Elliot Liebow as he set out for Tally's Corner: "The scientific method is doing one's darndest with his (or her) brains, no holds barred" (Liebow, 1967:235).

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