

An Anthropological Approach To The Study Of Illness Behavior In An Urban Community

J. Kevin Eckert and Melvyn C. Goldstein
Department of Anthropology
Case Western Reserve University

ABSTRACT: As medical anthropology addresses health issues and problems in the United States, new methodologies and research strategies are necessary. Anthropology's traditional "key informant" methodology needs to be augmented by strategies that address issues of representativeness and validity. Health planners and professionals who want to implement programs demand this kind of data.

This paper presents an anthropologically oriented research approach for understanding health care utilization behavior in an urban locale. Considerable variation was discovered among persons living in a poor urban area designated by the Federal government as short of "primary medical care manpower." Factors determining health decisions and patterns of resort were economic situation, perceived "gravity" or seriousness of symptoms, whether or not primary care was financed by the public sector, and individual and family experiences with and perceptions about local providers. Peoples' perceptions about local providers were related to the organization and characteristics of the local health system and proved to be critical determinants of utilization behavior.

The dominant approach to issues of health care utilization has been a macroanalytic one that utilizes large samples, statistical analyses, and cross-sectional surveys administered at one time. This approach uses a relatively small number of indicators to represent concepts of

considerable complexity, such as the predisposition to use services, the characteristics of their organization, and the need for them (Andersen and Newman 1973; Wan and Soifer 1974; Wolinsky 1978). It undervalues the importance of psychosocial and organizational factors, and emphasizes "need" and availability of resources as the primary determinants of utilization.

The one-time, impersonal survey methods that characterize most health related behavioral sciences do not produce insightful knowledge about the ways that people perceive and think about their problems. Though statistically representative, these surveys are often inaccurate. Chen and Murray (1976: 253) say, "A rural Third World survey is the careful collection, tabulation and analysis of wild guesses, half truths, and outright lies meticulously recorded by gullible outsiders during interviews with suspicious, intimidated but outwardly compliant villagers." We believe that this also frequently applies to work in the U.S. as well as Third World research.

Although cross-sectional surveys are directed at understanding causal processes that occur over time, their conclusions are based on general observations made at only one time (Babbie 1979). They transform the dynamic process of seeking and using health care into a static one and fail to indicate the complex patterns of behavior of users. They do not generate any understanding of why users opt or do not opt for various alternatives (i.e., how users evaluate the costs and benefits of alternatives including the "style" in which the services themselves are delivered). Traditional anthropological methods, on the other hand, can address these issues. Such methods are microanalytic and typically call for extensive involvement in a community over time, meticulous observation (census taking, map making, minute behavioral description), casual and serendipitous observations, informal and formal intensive interviewing, and firsthand participation in as many life events as possible.

Both macroanalytic and microanalytic approaches have strengths and weaknesses associated with them. Clearly what is needed is a greater integration of the positive aspects of each in health care utilization research. The impersonal, one-time survey method that presently dominates health research is inadequate for this task since elicitation of more in-depth information requires extended contact and recontact, personal trust, and rapport with subjects. The relationships of trust and rapport fundamental to traditional anthropological fieldwork must be incorporated in medical research in the U.S. for they provide a window to a different level of data.

Basic Approach and Research Design

The research upon which this paper is based was conducted on the near west side of Cleveland in an area designated by the federal government as short of primary medical care manpower. Biomedically oriented health care providers in the area consisted of two acute care hospitals, one clinic, and a handful of primary care physicians. The area was ethnically and socially diverse, with Western and Eastern Europeans, Puerto Ricans, and Appalachians as the primary population groups. Black residents were restricted to a public housing project. The area was an economically depressed working class neighborhood on the decline. Housing primarily consisted of single family frame dwellings, a good portion of which were in disrepair. Churches, small corner grocery stores, and bar restaurants were scattered throughout the area, along with vacant lots and abandoned buildings. One interviewer observed large numbers of homes with fenced-in yards protected by barking dogs. The area encompassed 6 census tracts and had a population of approximately 12,000 in 1980. It was an underserved and poor area for which virtually no data existed on the health utilization patterns and behaviors of residents.

Design: The study utilized a prospective design to gather information on sickness episodes within a randomly selected sample of 47 households containing 149 individuals. This minimized the need for asking people to generalize about their actions, a notoriously inaccurate undertaking (Babbie 1979). Data on concrete sickness incidents was collected at three week intervals over (on the average) a four month period of time. The validity of findings was enhanced since the circumstances surrounding sickness incidents could be checked and cross checked.

The research was designed in three stages over 15 months. Two months were devoted in stage one to the development and field testing of two interview instruments, and to obtaining a random sample of households. The sample was drawn from the 6 census tracts using the "Census Tract Street Index for Cuyahoga County" (Third Edition). During stage two, four months were spent administering two interviews to gather baseline data on the social and demographic characteristics of the households, the health of household members and their utilization of services, and health perceptions. Stage three involved regular follow-up interviews at three week intervals for an average of 4 months per household (households were in the study from 2 to 8 months). The interviews were conducted over the telephone or in person and were intended to elicit detailed accounts of recent and/or on-going illness episodes.

Method: Interviews were conducted by five graduate students in the social sciences. The interviewers were given a one day training session prior to conducting the interviews and were then systematically debriefed semi-monthly. The central aim of the debriefing sessions was to provide a formal occasion for the fieldworker's data and the debriefer's theoretical concerns to come together. As noted by Bohannan (1981) debriefing sessions allow complete touch with the theoretical materials at the very time submersion in the data gathering process is going on. The debriefing sessions also were important for reemphasizing

the goals of the study, making progress, and dealing with problems faced by the interviewers while in the field.

The stage three prospective interviews were open-ended and gathered information on the number and type of illness problems experienced by individuals in the household since the last contact. The interviewer was trained to inquire about such matters as perceived seriousness and susceptibility, duration of the problem, and personal inconveniences created by the problem. The second line of questioning inquired about what the person or others in the household did for the problem. The interviewer was trained to probe for information regarding types of treatment, sources of treatment, accessibility and barriers to treatment, and satisfaction. The last broad area of questioning concerned outcome as well as planned course of action for unresolved problems. When possible these interviews were conducted over the telephone. When no telephone was available or when the interviewer felt he/she was losing rapport with the interviewee, a home visit was made.

This approach revealed at least three important things. First, while it was hoped that families could be contacted every two weeks, this was not feasible since respondents had a difficult time understanding why they were being contacted so frequently when "nothing" was happening to them. Illness episodes seemed to occur at less frequent intervals. Second, female interviewers had an easier time getting interviews than male interviewers. The study was conducted in a relatively high crime urban neighborhood and it appeared that female interviewers presented less of a threat to respondents at home during the day (many of whom were women). Third, respondents who were first contacted and interviewed in person would talk at length over the telephone about their illness episodes.

The analysis of data on illness episodes involved several steps. Each interviewer was asked to write up a detailed case report for each separate illness episode for each of their households. They were asked to follow a

detailed outline which fit the coding categories used for formal content analysis and comparison. Individual case reports were then coded according to categories dictated by theoretical and conceptual models of illness behavior as well as categories which emerged from debriefing sessions. The coded data was statistically analyzed. During this stage of analysis every attempt was made to maintain as much as possible of the rich ethnographic data.

Sample Description

The 47 households (N = 149 individuals) ranged in size from one-to-nine with a median size of three people. The preponderance of key respondents were female (72 percent). In the majority of cases women saw themselves as the central decision makers concerning health matters. The majority of the respondents identified themselves as either Protestant (27 percent) or Catholic (53 percent). The median total income per household was between \$7,900 - \$9,500 per year; however, 23 percent of the families had incomes over \$15,800. On the average, key respondents reported knowledge of four professional health care options. As expected, the major providers of health care in the community were the most frequently mentioned: a county hospital, a private hospital, a free health center, and several private physicians. Overall, the majority of respondents had either a stoic (53 percent) or reasoned/responsive (32 percent) attitude toward health problems. Only seven people stated that they were preoccupied with their health. The major ethnic affiliation of sample households was European (N = 35). There were three Hispanic and five Appalachian households. Four households could not be categorized; respondents simply said they were American. Approximately half of the sample was born in Cleveland.

Illness Behavior in an Urban Poor Neighborhood

Analysis of census tract data related to health status and other social characteristics suggested that the study area consisted of a relatively homogeneous group of medically indigent individuals. However, initial analysis of the data quickly dispelled this myth. It was immediately apparent that there was considerable variation among households in illness related behavior. Four factors emerged as essential determinants of patterns of resort: (1) the manner of payment for professional health services (such as Medicaid/ADC, private insurance, or self-payment); (2) total household income; (3) household/situational factors (such as availability of a car or proximity to a health resource); (4) individual or family experience with health care providers. On the basis of the first two variables the health utilization patterns of our sample households separated out into three distinct groups: low-income public benefit recipients, low-income marginally employed, and higher-income employed.

Group 1, the low-income public benefit recipients, consisted of seventeen households. They had the lowest per capita income (less than \$3,200) and relied heavily on the public sector of the professional health care system (i.e., a public county-run hospital and a city-run clinic) or on physicians who took Medicaid/ADC patients. Nearly all of their health care was paid for through Medicaid, Medicare, or ADC.

Group 1 had the highest frequency of reported illness episodes per person/month and took most of these problems (78 percent or 60 out of 77 episodes) to professional providers. Since households varied in size and in length of time in the study, these factors were controlled when calculating the frequency of illness over time. On this basis, they appeared to have the greatest need for health care and in fact responded to this need by having the highest percentage of episodes taken to professional health care providers. In general, our findings

supported the view that public sector programs have had some impact on facilitating access to public sector providers for the "hardcore" unemployed and poor.

In other studies of illness related behavior (Andersen and Newman 1973; Wan and Soifer 1974; Wolinsky 1978), perceived seriousness or "gravity" of symptoms has been shown to be an important determinant of utilization behavior. Respondents were asked to rate each illness episode as not serious, a new symptom for which there was some worry, an old problem for which there was some worry, and finally either an old or new problem for which there was great worry. For Group 1, increased seriousness was positively and significantly related to seeking care from professional health care providers. For example, only one household in this group perceived a barrier to obtaining needed services. Not only was this group using services as needed, but they expressed a relatively high level of satisfaction with these services. In only seven episodes did the respondent voice dissatisfaction with the treatment received. This finding was of special interest since 41 percent of this group voiced dissatisfaction to an omnibus question on the initial survey interview pertaining to satisfaction with the health care system in general. This is an interesting example of how evaluation of individual incidents can differ dramatically from one's overall attitude or response to a once asked general question. Another way of looking at satisfaction with the efficacy of treatment is to find out whether or not the illness problem was perceived as resolved. In group 1, only four (5 percent) episodes were unfavorably resolved.

In general, respondents were satisfied with the episode-by-episode care they received and perceived few barriers to obtaining care reimbursable through public funds. In most cases this group reported that their health problems were favorably resolved. However, indirectly it was found that there were in fact serious economic barriers any time a health problem involved items or services outside of the "reimbursable" Medicaid/ADC category. For example, two

households in this group reported that they did not buy recommended non-prescription drugs because these were not covered by ADC.

Group 2, the low-income marginally-employed, consisted of 16 households. This group had a higher per capita income than Group 1, averaging between \$3,200 and \$4,500 per person/year. They did not have Medicaid/ADC or Medicare coverage. At the time of the first interview the head of household or the key respondent was employed in what could be categorized as a semi-skilled or skilled occupation (what Hollingshead and Redlich [1958] would call "blue collar"). Group 2 had a slightly lower frequency of illness per person/month than did Group 1. They were also different in that they took fewer of their illnesses to the professional sector of the health care system (65 percent compared to 78 percent). Instead they relied more heavily on self-treatment or home remedies as a first course of action. If this did not resolve the problem, then professional sector treatment was sought.

Group 2 differed from Group 1 in the relationship between perceived seriousness or "gravity" of symptoms and seeking care from professional health care providers. Group 2 households were significantly less likely to seek professional care for problems they perceived to be "not serious" or for "old" problems for which they had "some concern." Thus, what emerged was a tendency for perceived seriousness to decrease in importance as a "cue" for seeking professional health care as the financial burden of such care increased. Three households in this group stated directly that they perceived financial barriers to seeking health care.

Also, Group 2 used a wider range of health providers than did Group 1. For example, over the duration of the study, illness episodes were taken to both public and private hospitals, private solo physicians, company doctors, and public clinics. In most cases, visits to the professional private sector were paid for through Blue Cross/Blue Shield, commercial insurance, or out-of-pocket. When they

used public providers, two patterns of payment emerged. Either they paid out-of-pocket on a sliding scale determined by income and family size or, very interestingly, they utilized a local city run and financed "free" health center where their status became /de facto/ equivalent to those in Group 1 (i.e., totally free care). Although in theory the free health center had a sliding scale as did the county hospital clinics, in reality it was truly free in that it continued to see people regardless of their ability to pay. Thus, these low-income (near poor; low-income employed) individuals who could not obtain "welfare" benefits were able to redefine their status as eligible for free health care on a de facto basis. When private physicians were used, they tended to be older physicians practicing in the area who charged fees of ten to fifteen dollars per visit, which was equivalent or close to the sliding scale fees of public clinics.

Use of the free health center further illustrates the manner in which individuals in this group consciously manipulate their alternatives and how one community resource can help to rationalize health care for the poor. What we expected was a great deal of fragmentation and discontinuity in service use and health related behavior for the poor and near poor. Initially, when we examined our coded data we observed that the low-income employed (and public benefit recipients as well) had more diverse patterns of resort than the higher-income group. However, when we looked closely at the process of health seeking over time rather than at each case in isolation, we were able to discover why different actions were taken at different times. We found that, in fact, there was a rational ordering of resort patterns. It was only when we found them using a hodgepodge of services over time and asked them to explain this that the patterning appeared. Often, subjects did not initially report critical elements either because they did not come to mind or because they seemed unimportant at the time. For example, a respondent reported going to the county hospital for one incident, but during a later interview we found that he normally went to the free health center

physician. We then discussed his earlier accounts and found out that the free health center physician had been contacted and had referred him to the hospital clinic that he used. This cross-checking and internal verification over time led to the collection of information normally ignored in survey research.

For both Groups 1 and 2, the free health center was a key care provider. While the center was publically run and financed, care was delivered in a style akin to private family practice. The people we interviewed reported that it minimized much of the red tape associated with health care delivered by other public sector providers. Furthermore, they called the physician in charge their "family doctor," saying that both he and the nursing staff took a "personal interest" in them. As illustrated by the previous example, the free health center staff did its best to make appropriate referrals and to track patients through the complex web of the public bureaucracy.

Group 3 consisted of 14 households. This group had the highest per capita income, averaging between \$4,600 and \$6,300 per person/year. At the beginning of the study all heads-of-households were employed in jobs that could be categorized as semi-skilled, skilled, clerical, or sales. Group 3 had the lowest frequency of illness episodes per person/month and on this basis appeared to be the healthiest group. Seventy-two percent of these episodes were taken to professional health care providers. Over the duration of the study households used an average of 1.5 different sources of professional care. This is not surprising since this group was the most likely to have a traditional "family doctor" to chart their course through the health care system. They relied on the private sector of the health care system and used "public" facilities in only rare cases (usually emergencies). Typically their primary health care was paid out-of-pocket; hospital care was paid through third party health insurance. Two households belonged to a health maintenance organization which covered all health care costs except dental.

Group 3 was similar to Group 2 with respect to the relationship between perceived seriousness of symptoms and use of professional health care. They were less likely to use professional services for problems they perceived as "not serious" or "old" problems for which they had "some worry." Since they had to pay for most of their primary care visits, they were slower to seek such care than was Group 1. They were slightly more satisfied with their episode-by-episode care than was Group 2 (they were dissatisfied with professional treatment only 10 percent of the time). One household mentioned that the high cost of care was a major reason of dissatisfaction. Similar to the other groups, a high percentage of illness episodes were positively resolved.

Group 3 illustrated a use pattern typical of the private fee-for-service system. Households were tied into a primary care physician who directed much of their utilization behavior. The cost of health care appeared to be an increasing burden for this group, but to a lesser degree than was seen in Group 2. While they had a higher income than the other two groups they were not immune to unemployment and alterations in their illness related behavior.

Summary and Conclusions

The goals of this paper were to: (1) report on the development of an anthropological and holistic approach to understanding illness related behavior in a complex urban setting; (2) apply this approach to an urban neighborhood. In general, it was possible to collect rich and insightful "anthropological" community based information on illness related behavior in a complex urban setting using a prospective and in-depth approach. As well, devising a systematic sampling strategy helped achieve greater representativeness, an essential ingredient for the growth of anthropology in applied policy areas such as health utilization not only in this country but also abroad. Following

a panel of households over time was an effective way to discover and understand the complex patterns and decisions made around seeking treatment for illness. The approach proved to be cost effective, especially when follow-up contacts were made over the telephone.

Within the health manpower short study area, three rather distinct groups and patterns of resort in response to illness were discovered. Key factors determining both health decisions and patterns of resort were economic situation, perceived "gravity" or seriousness of symptoms, whether or not primary care was financed by the public sector, and individual and family experience with and perceptions about local providers.

Contrary to the results reported in some large scale studies of illness related behavior (Andersen and Newman 1973; Wan and Soifer 1974), perceived seriousness and evaluation of symptoms as a motivation for seeking professional care was moderated by whether or not one had to pay directly for the service. Low income public benefit recipients were more likely to use professional services (largely public) than persons who were required to pay out-of-pocket.

More strikingly, however, was the impact which the characteristics and organization of health care resources had upon peoples' health care utilization behavior. Variables associated with attitudes, values, and characteristics of the delivery system are frequently left out of large-scale studies, yet as Wolinsky (1978) indicates and our findings support, these factors may be the actual determinants of utilization behavior. A "free" health center run by a single M.D. was extremely important in meeting the health care needs for those who had no public or third party health care coverage. The personal, family-oriented style of care offered by the center staff coupled with minimal "red tape" and questioning about payment were exceedingly important to clients. Although poor, persons who used the free health center felt they had a personal physician who was concerned with their overall well-being.

The importance of looking at the local health care system in its totality cannot be overemphasized (i.e., how individuals in a local community come to understand and use the resources available to them). While individual patterns of resort initially seemed disjointed and /ad hoc/, increased rapport with and understanding of the family led to the discovery of consistent and generally appropriate patterns of utilization. All people had access to some type of health care regardless of income and this health care included linking the client into wider health networks.

REFERENCES CITED

- Andersen, R., and J. F. Newman (1973). Societal and Individual Determinants of Medical Care Utilization in the United States. *Milbank Memorial Fund Quarterly* 5(1):95.
- Babbie, E. (1979). *The Practice of Social Research*. Belmont, California: Wadsworth Publishing Company.
- Bohannan, P. J. (1981). Unseen Community: The Natural History of a Research Project. *IN Anthropologists at Home in North America*, D. A. Messerschmidt (ed.). Cambridge: Cambridge University Press, pp. 29-45.
- Chen, K. H. and G. F. Murray (1976). Truths and Untruths in Village Haiti: An Experiment in Third World Survey Research. *IN Culture, Natality, and Family Planning*, J. F. Marshall and S. Polgar (eds.). Chapel Hill, Carolina Population Center, pp. 251-267.
- Hollingshead, A. B. and F. C. Redlich (1958). *Social Class and Mental Illness*. New York: John Wiley and Sons.

Wan, T. T. H., and S. J. Soifer (1974). Determinants of Physician Utilization: A Causal Analysis. *Journal of Health and Social Behavior* 15:100.

Wolinsky, F. D. (1978). Assessing the Effects of Predisposing, Enabling, and Illness-Morbidity Characteristics on Health Service Utilization. *Journal of Health and Social Behavior* 19:384.