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Barriers and Survival: A Study of an Urban Indian Health Center

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INTRODUCTION

Today slightly over half of the 1.5 million American Indians and Alaska Natives live in towns, cities, and other off-reservation communities in the United States.[1] This migration to the urban areas has increased dramatically during the last two decades. The increase began during the 1950s and 1960s with the relocation of Indians to the cities, and was partially financed by the federal government. Indian families were encouraged to leave the reservations and migrate to the cities to obtain jobs and to avail themselves of other economic opportunities.[2, 3] In many instances, leaving the reservation meant also leaving behind the support of kin and access to free medical care.

Once in the cities, most Indian families found themselves living in urban ghettos with few resources to cope with the new environment and its foreign institutions and rules. In time of sickness, many Indian relocatees found themselves denied, declared ineligible for, and/or unable to afford medical care in the cities.

As more and more Indians migrated to the cities, their health problems increased, and concerns over their access to health care escalated. Fortunately, with the advent of consumer health move-

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ments in the 1960s, a number of "store front" free clinics serving Indian clients sprang up in cities across the country. Over a period of time, many of these initial "store front" clinic operations became eligible for federal funding as part of a network of urban-based Indian health clinics.[4]

Although Congress has supported the development of these health resources for urbanized American Indians by first allocating special "set aside" funds and then formalizing the allocation in the passage of the Indian Health Care Improvement Act, the federal Indian Health Service has only reluctantly implemented the program. Some of the common arguments against such a policy change include the following: (1) There are not enough dollars for off-reservation health care service expansion; (2) Indians in the city live where there are more health resources, including indigent health care; and (3) expansion of federal health care resources in the city impinges on medical free enterprise. Faced with strong opposition, most urban-based Indian health clinics must lobby intensively each year at the congressional budget hearings in order to ensure survival.

Although a number of these urban-based clinics have been operating for more than two decades, their impact on the health status of urbanized American Indians and Alaska Natives has not been the subject of much research interest either by Congress or by social scientists. This study is an attempt to examine one such urban-based clinic in Arizona and to profile the American Indian patients who utilize it.

THE TUCSON INDIAN CLINIC

The urban Indian population of Tucson consists largely of Tohono O'odham (formerly Papago) and Yaqui tribal members. Although most members of the Tohono O'odham tribe can receive health care at the nearby federal Indian Health Service (IHS) facilities at the San Xavier Reservation, only a segment of the Yaqui tribal members are eligible for this free federal health care. Despite their eligibility for services, this population continues to experience significant gaps in the provision of services, both in the quality and quantity available. For example, there are substantial numbers of Yaqui members who are not receiving health care services of any kind, either because of their pending enrollment

status or because they are not enrolled (and therefore not federally recognized). There are also other federally recognized Indians from elsewhere in the United States residing in Tucson who are not considered "legally" eligible for Indian Health Service care. The nearby Tohono O'odham San Xavier Reservation's home health care program, for example, is limited to members of the tribe living on the reservation. Thus urbanized tribal members can come to the IHS facility and receive health care, but the IHS services cannot come to them. This national federal policy to limit services to reservation-based tribal members discriminates against tribal members who have been forced (out of economic necessity) to move into the nearby city of Tucson.

Fiscal support for the Tucson Indian Clinic is similar to that of other urban Indian health programs—vendor payments from Indian Health Service, Medicare, welfare, or other third party payments. Because most of these agencies' reimbursement schedules are minimal and rarely sufficient to cover the total cost of service, the income generated is usually insufficient to meet all the overhead needs or to support acquisition of modern medical equipment or facilities. Thus the clinic must constantly search for additional funds to keep its own health care services ongoing and must rely heavily on referral to other, better-equipped facilities.

A constant and chronic shortage of stable and sufficient financial support is common in similar organizations where such latent and manifest consequences threaten their survival each year. For example, most of these urban clinics are constantly threatened by potential loss of their Indian Health Service contracts. For a number of years, when Congress has asked IHS to decrease its funding request, IHS has routinely recommended a cutback that earmarked the elimination of funds for urban-based Indian health programs. Other factors also threaten the continuation of these clinics. Most recently the soaring cost of medical malpractice insurance has become so prohibitive that some clinics have been forced to close.

Because of the lack of institutionalized support and inadequate funding, some clinics have at one time or another experienced such structural instability that they have been subjected to criticism for mismanagement, lack of skilled personnel, and/or delivery of unsatisfactory health care. Usually these structural problems are not readily visibile to an outside observer, or, if visible, the problems are often poorly understood even by those

most intimately connected with the day-to-day inner workings of the facilities.

Although the Tucson Indian Clinic has not been subject to these criticisms, it has nevertheless had to "fight" to keep its doors open. According to its present director, the facility has managed to survive by keeping alive its overarching ideology, i.e., that Indians deserve culturally relevant care for their health problems. The director indicates that "when medical personnel understand the patient, the culture, and the patient's perception of the health problem, the effectiveness of service delivery is maximized." Some of this culturally sensitive health care is made possible by employing staff who are drawn from the local Indian population and are familiar with the unique tribal languages and beliefs of this population. Conversely, a lack of cultural awareness or concern could result in ineffective and dehumanizing health care.

THE CLINIC'S PATIENTS

To obtain a profile of the patient population who utilize services at the clinic, the principal investigators selected a random sample of three hundred medical records from 1984 to 1987 for review and analysis. During the period selected for analysis, the Tucson clinic provided primary medical services as well as home health care to Indian patients who were unable to come to the clinic. The data from the clinic's medical records indicated the following tribal representation:

TABLE 1
Clinic Clients by Tribe (N = 300)

Tribe	N	Percent
Tohono O'odham/Pima	171	58
Yaqui	47	16
Navajo	43	14
Other	39	12
Total	300	100

As would be expected, the Tohono O'odham, Pima, and Yaqui, the three major tribes in the area, comprised the majority of the clinic population, in addition to representation from other Southwestern tribes. This sample clinic population mirrored the distribution of American Indians in the Tucson area as reported earlier by Evaneshko.[6]

Many of the Tohono O'odham tribal members who reside in greater Tucson and who seek care at the urban clinic tend to be from families with lower incomes than the Yaquis (chi-square = 3.22, 1 df $p < .10$). This seems to indicate that many of the Tohono O'odham tribal members are without the financial means to afford transportation to the San Xavier IHS facilities and must therefore rely on the Tucson Indian Clinic for their health care.

The mean income level of this clinic population is $6,000 a year. Those who live on less than $6,000 a year are part of the mass of the urban poor. Most of the families have large households; for example, the average household size for this group is 5.3 persons. Family survival is often dependent upon public assistance. Table 2 shows that 47 percent of the families are on public assistance (local tribes include Tohono O'odham and Yaqui; non-local tribes include all the others, i.e., Apache, Navajo, etc.).

As can be seen, *nearly one-half of all the clients are dependent upon public assistance and/or Social Security or other benefits* for their primary source of income. Fifty-three percent have some income from employment. Because Indian families usually migrate to the cities to find work, the Indian families from outside the area are

TABLE 2
Source of Income by Tribe (N = 197)*

Source of Income	Local Tribes	Non-Local Tribes	Total
Wages	74 (50%)	30 (62%)	104 (53%)
AFDC-GA	42 (28%)	10 (21%)	52 (26%)
SS-Pension	26 (17%)	6 (13%)	32 (16%)
Disability	6 (4%)	1 (2%)	7 (4%)
Unemployment	1 (1%)	1 (2%)	2 (1%)
Total	149 (100%)	48 (100%)	197 (100%)

*103 records did not state income because patients were dependent children.

more likely to have income from wages than are clients from the local tribal groups (chi-square = 2.76, 1 df, $p < .20$, not statistically significant).

The data derived from the three hundred medical records contained material regarding the patient's reason for his/her most recent visit. The various types of clinic visits are summarized in Table 3, which compares persons below age 21 and persons over 21.

As Table 3 shows, almost all visits (87 percent) to the clinic were for acute medical problems. Only a few of the patients came for other reasons. In addition to the above data, the clinic offered home visits to 6 percent of the total sample of 225. Three-fourths of the visits were to homes with older patients or to handicapped persons who, for a variety of reasons, were unable to come into the clinic. Although some of these clients were visited by the registered nurse, most were frequently and regularly visited by the trained community health aides. On the other hand, when patients did come to the clinic, almost all of them were seen by the physician as well as by the nurse. In the latter half of 1987, when the clinic lost its physician due to the high cost of medical malpractice insurance, the bulk of the clinic activities centered around home visits and referrals of patients to other health facilities.

During the time when a physician was on staff, the clinic was

TABLE 3
Type of Clinical Visit by Age (N = 225)*

Problem	Age of the Patient					
	< 20 Yrs		> 21 Yrs		Total	
	N	Percent	N	Percent	N	Percent
Acute	95	86	101	88	196	87
Well child	14	13	0	0	14	6
Prenatal	1	1	11	9	12	5
Other	0	0	3	3	3	2
Totals	110	100	115	100	225	100

*The other 75 most recent visits were made in the home by clinic staff.

able to offer a wider range of medical services. For example, most of the acute care cases were treated and cared for in the clinic. Medical records indicated that among those requiring acute care, 13 percent were treated as a result of an accident or injury. Within this service category, younger patients received acute care more often, while older patients received more follow-up services for chronic diseases such as diabetes or hypertension. The average number of clinic visits per client was 7.7 per year, which indicates a consistent use pattern.

The consistent medical care utilization pattern also gives some indication of how satisfied these patients were with the services offered by the Tucson Indian Clinic. The number of patients willing to return again and again provides some evidence of patient satisfaction with the clinic, especially since many of these patients also indicated they have access to and could use other facilities. For example, in the survey, 82 percent indicated that they were also registered at other health facilities. Thus, although Indian patients seem to use the Tucson Indian Clinic primarily for acute care, they also utilize other medical facilities for different types of medical care, e.g., surgery and long-term treatment. Often referrals to other facilities were initially arranged by the staff at the Indian clinic.

It should be noted that a significant proportion of those who utilize other health facilities specify the use of the federal Indian Health Service (IHS). Therefore, for some patients the Tucson Indian Clinic is but one station in a larger network of community medical care resources. Overall, approximately one-third of the Indian patients received health care coverage from services other than the IHS. Against this background drawn from the clinic medical records, it is clear that the urban-based clinic in Tucson serves in part as an important "intake valve" for the nearby Indian Health Service facilities, generally giving care in acute or emergency cases and acting as a referral linkage for the more serious cases. Such an intake function serves IHS well, especially financially, because judging from the funding level of the clinic, the yearly cost per patient is cheaper at the Tucson Indian Clinic ($245.85) than it is at IHS ($970.76).

Further analysis of the sample of clinic records revealed that half (55 percent) of the patients seen were female.[7] Patients ranged in age from 1 year to 85, with an average of 24.8 years. Nearly one-half of the patients were under 21 years of age, and

56 percent were over 20 years of age. Among the adults (N = 143), 60 percent were single and 27 percent were married. Although over one-fourth were married, many clients had a considerable degree of marital breakdown, i.e., were divorced or separated.

In general, review of data drawn from the clinic's medical records revealed that it is serving a broad and representative spectrum of Tucson's Indian population and that its clients use the service frequently and appropriately. As the clients utilize the clinic, they tend to become "steady" customers, returning frequently for follow-up care and/or for other acute care. This pattern was best illustrated by the diabetic patients.

A review of each patient's medical history and medical problems revealed the distribution of patient diagnoses shown in Table 4.

The medical history data illustrate some common chronic health problems found among the clinic's patient population. This list of chronic health problems may serve as a good indicator of the health status of urbanized Indians in Tucson, because the clinic sample reflects many of the social characteristics found in the 1980 census about the known Tucson Indian population. This being the case, one can safely predict that about 17 percent of the urban Indian population in Tucson may be handicapped in some way, generally as a result of automobile accidents, heavy alcohol or drug use, birth defects, or arthritis. For example, 27 percent

TABLE 4
Types of Chronic Health Problems (N = 93)

	Percent
Diabetes	20
High blood pressure	19
Handicapped	17
Tuberculosis	8
Heart trouble	4
Cancer	1
Other	31
Total	100

of the client sample were treated in the clinic for accidents or injuries sustained in the home. Some of the accident cases were alcohol-related (11 percent); some were injuries resulting from work-related situations (14 percent), from accidents in the home (68 percent), or from automobile accidents (7 percent). The records also indicate that the health status of many urbanized Tucson Indians reflects a heavy proportion of chronic disease, accidents, and/or health problems due to inadequate nutrition.

The clinic records also revealed that 22 percent of the urban Indians smoked, and 26 percent reported use of alcohol or drugs. The presence of alcoholism among the American Indian population is well-documented by a host of studies, but the genesis of the problem is not clear. Graves[8] stated that Indian drinking could be perceived as "not an *Indian* problem, but as an index of the severity of the pressure to which Indians are exposed and the paucity of their available resources."

Family planning is one of the services offered to urban Indian families. Among those women who received prenatal care, one-half were seen only once at the clinic prior to the birth of their baby. The pregnant mothers (N = 18) followed in the clinic during this period had an average of 2.4 children each. The high utilization of the prenatal and the well child clinic indicates a population of mothers who are interested in delivering healthy babies and in maintaining the health of their children. For example, among the women who utilized the clinic, approximately 34 percent came to the clinic primarily for the well baby clinic services. At these visits, 45 percent of the children were given developmental tests; in about 7 percent of the cases, a child was diagnosed with some form of a developmental problem.

This review of three hundred randomly selected medical records from the Tucson clinic found that urban Indians do utilize these types of facilities, that these patients have many unmet medical needs, and that the clinic serves as an important link in the network of medical care for these families in the city.

CLIENT INTERVIEWS

In order to gather additional data to supplement and expand the background data that emerged from the medical record review, an in-depth case study interview schedule was used with a

selected sample of sixty current clinic clients. These clients were interviewed at home or at the clinic by trained Indian clinic staff.

Within the urban Indian families of those interviewed, the head of the household was often a female, as is reflected in Table 5.

The data in this distribution indicate that over one-half (61 percent) of the sample consists of mothers. This is not surprising, since they are generally the ones at home during the day when most of these interviews were conducted. Questions about marital status revealed that 32 percent of these individuals are married, 12 percent are divorced or separated, and 7 percent are widowed; although the remaining 49 percent declared themselves as single or never married, many of them were also single heads of households.

Perhaps because most urbanized American Indians in Tucson are not far removed from their tribal lands, the majority said they were still fluent in their native language and did maintain some of the tribal customs and traditions. Even in time of sickness, many said they generally utilized both modern medicine and traditional Indian medicine. Thus, despite prolonged urbanization, many still see their residence in the city as a mere extension of their traditional homeland. For example, the New Pascua Yaqui Reservation is five miles southwest of Tucson, and the larger Tohono O'odham (San Xavier) reservation lies along the southwestern edge of Tucson. A plurality (42 percent) of the respondents have been living in Tucson for over 20 years or said "all

TABLE 5
Household Position of Respondents (N=60)

Position	N	Percent
Mother	37	61
Father	8	13
Grandparent	3	5
Adult Child	11	17
Other	1	4
Total	60	100

of my life." Twenty-three percent have been in the city between 6 and 20 years, while 35 percent have been in Tucson for 5 years or less. Overall, the average number of years most respondents have been living in Tucson is 21.8 years.

Although many of the respondents have been in the city for over 20 years, a majority said that as youngsters they had attended federal boarding schools, usually Bureau of Indian Affairs schools in California and in Phoenix. Table 6 presents some of the data regarding the experience of these clients in the "Indian world," i.e., attendance at BIA boarding schools, existence of extended family networks on the reservations, and the use of traditional Indian practices and activities:

As the data show, a significant proportion of the urban Indian patients adhered to and/or engaged in some tribal activities or cultural traditions. In the interview, the respondents were asked, "Would you say your family holds strongly to old Indian ways? To both modern and traditional ways? To more modern?" These questions elicited subjects' evaluations of where their families rank on the traditional-modern continuum. The results yielded the following three categories:

In this context, "acculturated" refers to those who identify with traditional Indian values but who have garnered the necessary urban skills; "assimilated" describes those urban Indians who no longer hold significant American Indian traditional values and have accepted Anglo ways and values. Those who see themselves as being "traditional" tend to identify with their tribal identity and do not consider themselves acculturated. As Table 7 shows, 79 percent of the interviewed sample still value their

TABLE 6
Family and Cultural Factors (N = 60)*

	Percent
Have relatives living on reservation	86
Attended BIA or mission school	52
Engage in traditional activities	42
Adhere to some traditional Indian ways	33

*Cumulative table; does not add up to 100 percent.

TABLE 7
Respondents' Acculturation Identification (N = 58)

	Percent
Traditional	12
Acculturated	67
Assimilated	21
Total	100

traditional "Indian ways," although many have also adapted to urban lifestyles.

Further evidence of the continuing importance of Indian culture in their lives can be found in the fact that 90 percent of these urban Indian parents said they had enrolled their children in their tribe; 12 percent of the children were born on the reservation; one-third speak their native language at home; and another one-third report that their children are able to understand and speak the tribal language.

Given that many of these urban Indian families have retained their traditional culture, how well do they fare in the economic structure of Tucson? To measure this, subjects were asked about their occupational identity. The occupational distribution of adults in the labor market showed that the majority are blue collar workers, often unemployed. Two-thirds of all adult subjects have an occupational identity; the other one-third are housewives, students, or disabled and are not in the labor market. Of those adult subjects who are in the labor market, only one-fourth are currently employed. When subjects were asked the reason for their unemployment, many indicated poor health, disability, and/or layoffs. Further, of those who consider themselves in the labor market, one-fourth are over 55 years of age and thus are not likely to obtain employment.

Once again, these findings emphasize the major problem facing American Indians: poverty. Lack of job skills, poor health, low levels of education, and impoverished lifestyles are common problems faced by many American Indians, and the clinic sample provides validation of some of these problems. For example,

the average monthly income per family is about $618.16, well below the national poverty level of $970.00. Thus a majority (54 percent) of these urban Indian families are dependent upon public assistance or Social Security for their financial support. In addition, one-third of these patients live in low-cost housing, and 64 percent are tenants rather than owners of their homes. Many urban Indians live in cramped quarters, especially since the average household size is 5.3 persons, including an average of 2.6 children per family.

One of the major causes for the chronic cycle of poverty experienced by these families may be the educational background of the subjects. Approximately three-fourths have less than a high school education. This lack of education on the part of the parents casts a long shadow upon the school progress of their children. For example, among those parents with children in school, 55 percent reported that a child in the family had dropped out of school. When asked for the reason the child had dropped out of school, 44 percent of the parents reported that the child "didn't like it." In addition, parents reported that among their children still in school, 22 percent are not doing well, are having problems, or are "not interested in school." These findings add to an overall picture of poor adjustment to the non-Indian lifestyle, e.g., *nearly one-third of the parents didn't know or didn't want to explore why their children had dropped out of school.* With regard to schools, many Indian parents often seem to feel that they are dealing with a foreign institution, a place they themselves did not find useful, a place where they feel powerless to aid their children. Clearly, this is an area of great concern for the further acculturation of Indian families in the city.

Because many of the respondents themselves had attended BIA boarding schools, their parenting skills were often more appropriate for school age children than for pre-schoolers. Upon the discussion of this point, one community health worker observed that some of the former BIA students probably made better babysitters than mothers with their first or second child. In a comparison of urbanized Navajo mothers who attended boarding schools with those who attended public schools, Metcalf[9] attributes the lack of maternal skills to early and prolonged institutionalization. In other words, the boarding schools took young girls away from their homes at an early age and kept them in school, so they did not have the opportunity to learn about child rearing

through helping to care for younger siblings. Among the Indian mothers in the Tucson study, the fourteen who had attended boarding schools were more likely to have home situations where there was a high level (78 percent) of family disorganization, i.e., absence of fathers, public welfare assistance, and school problems. Metcalf's provocative study raised the issue of emotional discontinuity created by the separation of Indian families when children go to boarding schools. The Tucson clinic data reveal a similar degree of intergenerational stress apparent in some of the urban Indian families of Tucson.

From the standpoint of the larger picture, the Tucson Indian Clinic falls administratively within the Indian Health Service area. In comparison with other IHS areas, the Tucson IHS area is the smallest, with a service population in 1987 estimated to be 25,000. However, from 1980 to 1982 it had the third highest death rate in the United States.[10] The poor health status of Tucson Indians is also apparent from an estimated age-adjusted mortality rate of 1,011.1 per 100,000 population, a rate 1.8 times that for the United States all-races. This is despite a considerable amount of money spent by IHS in the Tucson area service population.

For example, according to the report of the Office of Technology Assessment[11] (OTA), the IHS spent $17,796,000 in the Tucson service area—an expenditure of $970.76 per Indian client. Of the total amount, $4,507,000 was spent on various types of contract services, including funds allocated to the urban Indian clinic agency participants. The Tucson Indian Clinic was often the urban Indian patient's first system contact point, and about one-third were able to resolve their health needs there, saving the IHS further time and expense.

Data from OTA's report[12] also indicate that accidents were the leading cause of death among the Tucson Indian population between 1980 and 1982. Among the sample of clinic clients, 14 percent of the respondents reported that within the last two years there had been at least one accidental death in their family, while another 2 percent reported permanent disability as a result of the accidents. In another instance, a parent noted that one of her children had committed suicide. The IHS reports that suicide is the fifth leading cause of death for Indian males in the Tucson area.[13]

Another prominent health and social problem identified in the study among Tucson Indians is the heavy use of alcohol. Among clinic respondents, 31 percent reported serious problems in their

families related to alcohol abuse. In some instances, the interviewees reported that they were the ones with the alcohol problem (24 percent). In other cases, it was the spouse (12 percent) or the adult child (19 percent), and frequently the respondents identified more than one person in the family as a problem drinker (46 percent). Thus, among the persons who reported health problems in their families due to alcohol, nearly half had more than one family member who was abusing alcohol. In addition, 13 percent of the subjects reported health problems due to drug abuse. In these cases, the respondents identified either themselves or their children as having the problem.

In the course of the interview, respondents were asked what they thought was the cause of substance abuse in their families. Their responses fell into three major categories: (1) psychological factors (self-blame), 50 percent; (2) social factors (peer group pressure), 36 percent, and (3) environmental problems (poverty, etc.), 14 percent. According to the OTA report,[14] "there were higher rates of hospital discharges for both non-dependent alcohol abuse and alcohol psychoses in Tucson than in the general United States short-stay non-federal hospitals."

Indian Health Service studies note that among Southwestern American Indians, diabetes is an especially difficult problem, reaching nearly epidemic limits. In fifteen out of twenty-two broad health problem areas, the diagnostic caseload rate for diabetes was 1.3 to 3.7 times greater than the rate for matched non-diabetic controls. Workload comparisons showed even greater disparity. Overall, diabetics accounted for nearly twice as many health problem episodes as did the control group (at least twice as many endocrine-metabolic, tuberculosis, viral infections, urinary tract diseases, and cardiovascular disorders). For example, the OTA[15] reported, "It is notable that in 1984, the Tucson IHS hospital discharge rate for diabetes (53.2) was twice that of both the IHS on average and United States short-stay non-Federal hospitals." In 1979 the Tucson rate was 17.4 per 10,000 population, indicating that diabetes continues to be a growing problem. Among the clinic sample, 43 percent of the subjects reported that at least one person in the family had diabetes; in 27 percent of the cases, the diabetic was the respondent, and in 10 percent of the cases, the diabetic was an adult child of the respondent. In 6 percent of the cases, two or more family members had diabetes.

Psychologically, the clients in general present symptoms in-

dicative of severe stress, especially among the aging population of urban Indians. Each subject was asked to respond to a standard test of health-related stress, the Health-Opinion Scale (HOS). The HOS was developed for use among non-clinical populations, and has been used with several other non-Western groups, including Eskimos and Navajos.[16] Although most so-called psychological measures present serious methodological problems for use with Indian groups, the HOS has proven to be of use in cases where self-disclosures are difficult. In this regard, the HOS does provide a measure of Indian attitudes and psychological distress, because the questions are rooted in non-threatening statements relating to their overall health conditions, e.g., "Are you bothered by bad dreams?" or "Do you feel weak all over?" The responses to this set of twenty questions were scored for all age groups (see Table 8); the analytical categories yielded three degrees of "unwellness" or "stress": (1) normal (23 percent), (2) moderate (borderline) (38 percent), and (3) severe (39 percent). This distribution clearly shows the high prevalence (77 percent) of stress among the adult respondents.

Further, when the stress levels of these patients are examined by age group, the data reveal that the older the subject, the more severe the stress (chi-square = 4.538, ldf, $p < .05$). This is not a surprising finding, given the level of socioeconomic problems and the severity of many of the health problems of these respondents. In some ways this study merely restates the obvious: To be an American Indian, especially under the pressure of cultural

TABLE 8
Levels of Stress by Age Groups

Level of stress	<19 Yrs. (Percent)	20–54 Yrs. (Percent)	>55 Yrs. (Percent)	Total
Normal stress	50	15	22	23
Moderate stress	50	33	22	38
Severe stress	0	52	56	39
Total	100	100	100	100

transition and urbanization, is to live with constant social pressure and chronic psychological stress. High stress scores, as indicated in Table 9, were found to be related statistically and significantly to age, poor health, and alcohol abuse.

In addition, those patients with characteristics listed in Table 10 scored as having severe stress, although not at levels that were statistically significant.

The clients who were more likely to score as suffering from severe stress were those who were experiencing the greatest degree of cultural discontinuity (reservation-born, native language speakers, practicing traditional ways), were suffering from the greatest

TABLE 9
Significance Levels and High Stress Scores*

	Percent	
Persons aged 21–54 years	63	($x^2 = 4.09$, $p < .05$)
Persons with poor health	57	($x^2 = 5.40$, $p < .01$)
Persons with alcohol abuse	69	($x^2 = 9.27$, $p < .01$)

*Cumulative table; does not add up to 100 percent.

TABLE 10
Client Characteristics with High Stress Scores (%)*

Characteristics	Percent with severe stress
Uses traditional ways	71
Abuses drugs	63
Is in white-collar/prof. occupation	57
Speaks native language	57
Is married	53
Is reservation-born	50
Is unemployed	49
Is on public welfare	41

*Cumulative table; does not add up to 100 percent.

amount of social dislocation (unemployed, public welfare recipient), were bearing the heaviest responsibilities and social pressures (married with parental responsibility), and were socially and psychologically disabled (heavy abuse of alcohol and/or drugs). Another group that fell into this category were those holding "white collar" jobs. Fifty-seven percent of them scored as having severe stress, perhaps an indication that moving out of the "underclass" may mean one is a stranger to both the native and the Anglo culture and is unable to find comfort in either world. The HOS responses highlight the relationship between health problems and sociopsychological pressures; these clients are understandably suffering in both areas. Yet there are virtually no mental health services available to urban Indians in Tucson.

In addition to using the clinic's medical services frequently, the respondents also received an array of social services. For example, in two-thirds of the cases, the clinic staff aided the subjects in obtaining transportation (a major problem for many urban Indians). Other services obtained included health education (40 percent) and social or psychological counseling (37 percent). Nearly two-thirds received referral services, either for additional medical care or for help with financial or housing problems. Nearly 30 percent received home health care on a continuous basis because of disability and/or inability to come to the facility. Thus the clinic served a wide range of medical and social needs of these Tucson urban Indians, and the clients utilized these services often.

When clients were asked what they liked about the clinic, one of the most frequent responses given was that the facility was located in an area where transportation and access were available—in other words, patients could get there. This is a critically important point for people who have no available personal transportation.

One-fourth of the clients also commented on the friendly atmosphere at the clinic. They said the staff "cared," were "warm," were "friendly," were "helpful," "understood Indian ways," etc. While some assumption exists that Indians receive better service and understanding in a culturally relevant setting, there actually have been very few evaluative studies of this issue. Although the current study did not focus on cultural relevance, the Tucson clinic clientele did mention that they came to the clinic because it had Indian staff who "understood" them.

When respondents were asked to compare this clinic with other clinics they have used and to indicate how this clinic differs from others, the array of answers included "has Indian staff," "faster service," "friendlier staff," and "better access." In general, most of the clients valued the fast service and the culturally sensitive staff and felt that these were the important elements that differentiated this Indian clinic from other clinic settings.

Another important service of the Tucson Indian Clinic is that of sending staff into the homes of disabled or elderly clients. One-third of the clients reported they had received a home visit from the clinic staff. These are tangible services available to urban clients, and the clients indicated their appreciation for these services.

In addition to receiving medical and social services at the clinic, over one-third (39 percent) of the clinic patients also used some type of traditional native medicine in time of illness. Of those respondents who turned to traditional native medicine to enhance the services of the clinic, 23 percent listed treatments with herbs, 31 percent with ceremonies, and 46 percent with other therapeutic interventions.

Among those who used herbs, yerba buena (common name) was most frequently mentioned; others reported using a "special mud" obtained from hot springs in the Southwest. These traditional Indian medical treatments are known and acknowledged by the clinic Indian staff, who understand and accept the frequent blending of Western medical care with the traditional Indian ways used by their clients. Moreover, these factors highlight the significance of the services to Indian patients who live in the city but who retain portions of their native beliefs and values.

In order to obtain a specific perspective about barriers to health care, the interviewers asked subjects the following question: "What are some of the things that keep your family from seeking health care?" Most of the responses indicated financial barriers, i.e., lack of transportation, lack of an adequate place to live, but most of all, inadequate funds.

SUMMARY AND DISCUSSION

In summary then, the Tucson Indian Clinic has met some important health care needs, but in general it is not equipped to deal with the more serious social problems that plague its target popu-

lation. For example, two-thirds of the clinic's client caseload are mothers with young children, most of whom are not able to be in the labor market. Many clients are unskilled, with less than a high school education. They live in low-income housing and have no adequate transportation. For those who have physical or mental handicaps, job services are almost impossible, given the lack of jobs for even the physically capable urban Indians in Tucson. Alcohol and drug treatment services are inadequate to meet the needs of this population. School failures and dropouts indicate an intergenerational social problem very common in many American Indian communities both on and off the reservation. Unfortunately, there are no mental health services to help deal with these problems.

On the other hand, the Tucson Indian Clinic serves a significant number of urban Indian clients and provides services that augment both the traditional tribal practitioners and the IHS clinical and hospital services. The clinic provides a useful intake or emergency service, working as the doorway to a larger Indian Health Service located several miles out of the city, and therefore serving as an important link within the health care delivery system for Indian patients.

The realities of the situation, however, indicate that the Tucson Indian Clinic has an extremely precarious existence due to the lack of stable and adequate funding. With the loss of the physician and auxiliary health services due to lack of funds, the clinic has had to diminish its workload and adapt its mission to home health care, outreach, and referral services. In order to keep its doors open for these services, the clinic needs continued, adequate IHS and community support.

Most of the urban-based Indian health clinics have established the importance of their contribution to improving the health status of American Indians and Alaska Natives, but because of their unorthodox origins, the clinics are generally not considered part of the mainstream health care delivery system, especially by the private sector. The clinics' "second class" status is partly due to the fact that they are governed by community boards whose members are viewed as lacking professional health expertise. And because most of these clinics are almost totally dependent on federal funds for their survival, they accept marginal status in the IHS health care delivery system, but utilize the congres-

sional political arena to keep their programs funded. They argue that their services fulfill an unmet need as well as deliver a type of health care that is culturally sensitive to a population still caught in the web of acculturation.

Culture as a variable is important to health care.[17] Clark,[18] a pioneer in the study of the relationship between culture and health, argues that "culture must be considered as an important factor in forging pathways to medical care." Hessler,[19] another scholar, has found that "congruence between culture and organization maximizes the chance for medical services to be accessible and acceptable to the consumers." Similarly, Anderson[20] found that race, culture, and ethnicity are powerful factors in utilization of health care. Along a similar theme, Mechanic[21] states, "Decision-making (to seek health care) is influenced by the processes of attribution of symptoms and causality, but they depend as well on the scope of helping facilities available, their congruence with cultural beliefs and behavior patterns, ease of access and barriers to use, and the larger network of helping patterns in the community." The Tucson Indian Clinic tries to fill in some of the gaps in network helping, eliminate the problem of the cultural vacuum, and provide a solution to the lack of accessibility faced by so many of its clients.

In this study, the high levels of stress, poverty, broken homes, school dropouts, and employment failure among Tucson Indian families would lead one to expect them to seek help from the urban Indian clinic. Indeed, the findings in the study indicate that the average client visits the clinic 7.7 times a year. This could be an indication of the impact of some of these larger social issues upon the help-seeking behavior of urban Indians. (Countries such as the Soviet Union and Israel have a per capita utilization of 9–12 visits; the United States and England average 4–6 visits; and Sweden falls within the 2–3 visit range.) Differences in per capita utilization of health care, according to Mechanic,[22] reflect cultural variations, availability and accessibility of services, and social ideologies as well as other factors. How are such factors manifested in urban Indian health care systems?

In addition to state, local, and private support, there were thirty-seven urban Indian health programs funded by the federal government by 1985 under the provision of the Indian Health Care Improvement Act.[23] Between 1985 and 1987, two of these

urban health programs were closed. The possibility of facing a similar circumstance obviously haunts many of the other urban clinics. Although the Tucson Indian Clinic does not have a medical doctor as of this writing, it continues to operate with funding from the federal government for home health care and outreach. In view of the large urban Indian population in need, this is a very small program. However, as the federal government attempts to maintain its current funding limits to control Indian health care costs, certain questions have emerged concerning urban health care. Should these clinics be allowed to offer services to non-Indians if the sole source of funding comes from IHS? Is the urban health caseload large enough to justify the cost and staffing pattern? Are urban health clinics duplicating IHS services? Should urban clinics forgo direct medical care delivery and instead focus on being social and referral agencies and utilizing paraprofessionals such as community aides to make home visits and/or to arrange transportation of the clients to other health facilities?

In some instances, these issues and the questions they raise cloud the relationships between the urban health clinics and the federal government. The federal government is looking to the wider use of social and community services to reevaluate existing intervention strategies in dealing with the health problems of American Indians and Alaska Natives. A recent article co-authored by Dr. Everett Rhoades, the director of IHS, stressed the need for innovative approaches to address the "new" types of health problems of American Indians and Alaska Natives. The innovative approaches, according to Dr. Rhoades, would "require intervention which would focus on changing personal and community behavior rather than intensified medical services."[24]

The changes in the patterns of Indian mortality and morbidity have produced new data. Today, American Indians are dying of injuries, violence, cardiovascular disease, alcoholism, diabetes, and mental illness. Three decades ago, Indians were being devastated by infectious diseases such as tuberculosis and gastroenteritis. While federal health care has made an impact on these treatable medical conditions, the current situation requires the help of the Indian people themselves who have the knowledge and expertise to work with their communities and make prevention programs a reality. Urban clinics such as the one in Tucson

are in a prime position to help with these new and chronic Indian health problems.

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NOTES

1. U.S. Bureau of the Census, *American Indians, Eskimos and Aleuts on Identified Reservations and in the Historic Areas of Oklahoma* (Washington, D.C.: U.S. Government Printing Office, 1985).
2. Joyptpaul Chaudhari, *Urban Indians in Arizona* (Tucson, AZ: University of Arizona, Arizona Government Studies, 1974).
3. Donald L. Fixico, *Termination and Relocation: Federal Indian Policy 1945-1960* (Albuquerque: University of New Mexico, 1986).
4. The Indian Health Care Improvement Act (P.L. 437).
5. For purposes of this paper, the official name of the urban clinic in Tucson has been changed to Tucson Indian Clinic.
6. Veronica Evaneshko, *Demographics of Native Americans in the Traditional Indian Alliance Catchment Area* (Mimeo., University of Arizona, Tucson, Arizona, College of Nursing, 1988).
7. The sex disparity among American Indians is well documented. A previous study of Indians in Tucson found that males outnumbered females from age 0-45 years of age, while in the older age groups females outnumbered males. Indian males die early, while Indian women approach the Anglo female mortality rates (Evaneschko, 1985).
8. Theodore D. Graves, "Drinking and Drunkenness Among Urban Indians in Urban Society," in *The American Indian in Urban Society*, ed. J. Waddell and O. M. Watson (Boston: Little, Brown & Co., 1971): 275.
9. Ann Metcalf, "From School Girl to Mother: The Effects of Education on Navajo Women," *Social Problems* 23 (1976): 534-44.
10. Office of Technology Assessment (OTA), *Indian Health Care* (Washington, D.C.: U.S. Government Printing Office, 1986).
11. *Ibid.*, Appendix C.
12. *Ibid.*, 345.
13. *Ibid.*, 147.
14. *Ibid.*, 148.
15. *Ibid.*, 149.
16. Jennie R. Joe, *Forced Relocation of a Traditional People: A Final Report* (San Francisco: Institute for Scientific Analysis, 1984).
17. Arthur Kleinman, "Concepts and a Model for the Comparison of Medical Systems as Cultural System," *Social Science and Medicine* 12 (1986): 85-93.
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19. R. H. Hessler, "Citizen Participation, Social Organization and Culture:

A Neighborhood Health Center for Chicanos," *Human Organization* 36:2 (1977): 125.

20. R. Anderson, *A Behavioral Model of Family Use of Health Services* (Chicago: Center of Health Administration Studies Research Series 25, 1968).

21. David Mechanic, "The Comparative Study of Health Care Delivery Systems," *Annual Review of Sociology* (1975): 45–65.

22. *Ibid.*

23. Indian Health Care Improvement Act, Public Law 94–437, the first legislation that allowed the federal Indian Health Service to fund health programs for Indians living in the city. This law was re-authorized by Congress in 1988 as Public Law 100–713.

24. Everett Rhoades, J. Hammond, et al., "The Indian Burden of Illness and Future Health Intervention," *Public Health Report* 102 (July–August 1987): 361.