Good health is the result of such factors as sanitation, adequate housing and clothing, nutritional food, and a health delivery system which protects against contagious diseases by immunization, provides for early detection and treatment, provides health education to promote practices that will prevent diseases, and gives services in a culturally acceptable way. This report discusses American Indian problems in securing any of these health conditions. These problems are categorized into four levels: (1) the differences in the key health indexes between Indians and non-Indians and unique health problems which seem to affect Indians more often or severely than other populations; (2) specific health needs such as dental care, family planning, and an adequate diet; (3) making services accessible and acceptable by removing barriers of distance, culture, and poverty; and (4) basic problems of sanitation and housing. The extensive interaction of the various factors in each of these levels is discussed for reservation and off-reservation Indians. (NQ)
HEALTH of the
AMERICAN INDIAN
report of a regional task force

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FOREWORD

This report was originally prepared as a section of Monograph No. 2 of the Region VIII DHEW Task Force on Indians and is reproduced with the permission of Dr. Rulon R. Garfield, Regional Director, Region VIII, Denver. The sections on health manpower and mental health from the monograph have not been included here.

Many people should be thanked for their assistance in the preparation of this report. Among these are the staffs of both Region VIII of DHEW and the Central Office of HSMHA—particularly the Indian Health Service staffs; the staffs of both the Billings, Mont., and Aberdeen, S.D., Area Offices of IHS; the staff of the Indian Health Center in San Francisco; the director and staff of the National Indian Health Board; the director of the Denver Native Americans United, and key staff of the Department of Pediatrics, University of Colorado Medical Center.

The authors of this report feel that it would have been impossible to review all published data concerning the health of Indians. We have used material that we felt was pertinent to a report such as this; time was a major constraint in the use of published data and other information.

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</table>
WHO ARE THE AMERICAN INDIANS?

An American Indian is anyone who declares himself an Indian and is accepted as such by his peers. Throughout this paper, the term "American Indian" will be used to include American Indians, Alaska Natives, Eskimos, and Aleuts. The 1970 U. S. Census reports that there are 827,000 American Indians in the country.* However, the term "American Indian" does not refer to a genetically homogeneous group of people. These people are diverse genetically and have widely different cultures and experiences. In addition, persons recognized as Indians may have non-Indian ancestry. In 1968, one-third of all births classified as Indian had one non-Indian parent (1).

Approximately one-half of American Indians are living off reservations. Information about them is sparse but their health needs must be considered if any impact is to be made upon the health of American Indians as a total group.

The other half of the Indian population, living on reservations, has maintained much of its traditional religion, social organization, language and values, and is generally described as poverty-stricken. However, it is impossible to make valid generalizations that will apply to all reservation Indians because there are well-to-do and poor, urban and rural dwellers within a single reservation. Between reservations there are differences in climate, general income, natural resources, and culture.

In Region VIII, which consists of Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming, there are an estimated 98,000 Indians. They live on 23 reservations that are fully or partly located in the region, as well as in towns and cities throughout the region. In the Denver metropolitan area there are an estimated 8,000 to 10,000 Indians, a population roughly double the official 1970 Census figure of 4,348 Indians residing in the Denver Standard Metropolitan Statistical Area.*

*The U.S. Census for 1970 underreported the number of Indians in the United States.
LEVELS OF PROBLEMS RELATING TO HEALTH

Good health results from a variety of factors such as sanitation (safe water and air and adequate waste disposal), adequate protection from the elements (housing and clothing), nutritionally adequate food, and an available health delivery system that protects against contagious diseases by immunization, provides for early detection and treatment of disease, provides health education to promote practices that will prevent diseases, and gives services in a culturally acceptable way.

Some American Indians have problems in securing any of the above conditions. A discussion of Indian health problems must then discuss and make recommendations about levels of problems. For example, much of the morbidity is due to poor housing and sanitation, which is due to poverty, which is due to lack of jobs, which is due to the educational system and the clash of Indian and non-Indian cultural values.

There are wide differences in the key health indices between Indians and non-Indians, and unique health problems that seem to affect Indians much more often or severely than other populations. This constitutes the first level of problems, and the health delivery system must attempt to address these deficiencies.

The second level deals with some specific health needs such as dental care, family planning and an adequate diet. The third level of consideration has to do with making the services accessible and acceptable by removing barriers of distance, culture and poverty. Finally there is the level of very basic problems of sanitation and housing.

The extensive interaction of the various factors in the various levels must also be appreciated. For instance, poor sanitation and crowding combine with poor nutrition to cause a high rate of infectious disease. Distances to services and the strangeness of their settings and methods mitigate against early care. Late care increases the likelihood of death or permanent disability, reduces the chances of quality survival and tends to assure the repetition of the cycle of poverty.

Each of these layers will be discussed in more detail later in the report.
There are two main systems for health care delivery to Indians. The most organized and prominent of these is the Indian Health Service.

**Indian Health Service**

The Snyder Act, passed in 1921, provided for health services for all Indians. However, since sufficient money was never appropriated for service to all Indians, an administrative decision was made that services would be provided mainly for Indians living on or near a reservation. The legality of this decision has been questioned.

The Indian Health Service (IHS) acquired the responsibility for Indian health from the Bureau of Indian Affairs (BIA), Department of the Interior, in 1955. IHS has a broad range of health programs and operates hospitals, health centers, itinerant clinics and, in addition, contracts with State and community hospitals, public health departments, and private physicians and dentists for care (2). Nearly 500,000 Indians receive care from IHS.

The charge to IHS is to plan and implement a total health program. In addition to environmental health services, acute and chronic diagnostic and treatment services and health education activities, there are a range of other specific health programs including the following:

- The maternal and child health program includes maternity care and family planning, with the recent addition of nurse-midwives in some locations to extend and augment these services. Well-child clinics provide preventive care for infant and preschool children while the school-age child is served by the school health program.
- The dental program started about 12 years ago on an incremental plan and is making use of dental assistants with extended responsibilities.
- Since otitis media was the leading reportable disease among Indians in 1970, there were special monies allocated for a concentrated attack on this problem, and each area office has a special otitis media program (3).

IHS, in cooperation with Federal agencies such as the Bureau of Health Manpower Education, National Institutes of Health, and the Office of Economic Opportunity (OEO), has been involved in training Indians for professions and for a variety of aide positions.
The 718 community health representatives now working as Tribal employees on Indian reservations have been very helpful in improving health services. They provide health education, outreach, and education about sanitation, and they help develop resources to meet needs for transportation and other services.

Involvement of the Indian community has been another emphasis of the IHS program. In 1972 there were 30 intertribal health committees, 8 area Indian health boards, 200 reservation health committees, 200 community health committees and one National Indian Health Board.

The achievements of IHS during the past 12 years have been impressive. An increased budget from $40 million appropriated in FY 1956 to $168 million for health activities and $44.5 million for construction of health care facilities in FY 1973 has helped IHS improve its service. One indication of improved Indian health is the drop in the infant death rate from 62.5 per 1,000 live births in 1955 to 32.2 per 1,000 live births in 1967. During the same period the U.S. infant death rate dropped from 26.4 per 1,000 live births to 22.4 per 1,000 live births. The maternal death rate for Indian women also decreased, from 82.6 per 100,000 live births in 1958 to 33.9 per 100,000 live births in 1967; the total U.S. rate was 37.6 deaths per 100,000 live births in 1958 and 28.0 per 100,000 live births in 1967(1).

Health Care for Off-Reservation Indians

Indians living near reservations are most apt to get their health care from IHS. The other off-reservation Indians must use the usual sources of health care, including private physicians, dentists and hospitals or public clinics and hospitals. The same problems of inaccessibility, impersonal treatment, eligibility restrictions, long waits, frightening surroundings, etc., await the Indian as await all of our socioeconomically disadvantaged as they attempt to avail themselves of care.

A few off-reservation Indians who live primarily in urban centers have a chance to utilize separate Indian centers. These centers are fairly new to the city scene and generally provide a variety of social services, but occasionally have some health services available.

The Denver Indian Center is funded by OEO and provides a variety of social services to Indians, especially those who are newly arrived in Denver. These services include referral for job placement and housing, small loans, legal assistance, free clothing, food baskets, grocery orders, sewing and cooking classes, and escorted trips to the welfare department to secure food stamps. In
addition to these services which help the Indian secure the necessities of life, the center provides some help with medical care. Indians are referred to medical and dental resources, and are accompanied to clinics in local health departments and public hospitals in order to help guide them through the process of getting medical care. The center also operates a well-baby clinic 1 day a week (4).

An Indian center was established in Dallas about 1969. This center assists Indians in finding employment and housing, thus contributing to some basic needs that affect health. The center also provides a preschool program and sponsors a youth organization for Indians. At this time, no health activities are provided, although the need is recognized (5).

An Indian health center has been established in San Francisco to serve an estimated 45,000 Indians in the Bay Area. (The U.S. Census states that there were 12,011 Indians in the San Francisco-Oakland Standard Metropolitan Statistical Area in 1970.) The center provides general health services, including dental and emergency care. The staff recently completed a health survey and will publish its findings.

In Seattle, Wash., Indians have established a health clinic with space donated by the Public Health Service Hospital. It is currently funded from a variety of sources, including the State Department of Health, the Regional Medical Program, and other Department of Health, Education, and Welfare sources. The clinic staff represents a variety of disciplines—a social worker, two outreach workers, a pharmacy assistant, two dental assistants, a dental clinic coordinator, and a medical clinic coordinator. These services are augmented by professional volunteers. In addition, the National Health Service Corps has provided the clinic with a physician, a dentist, and a nurse (5).

Such Indian centers, then, are beginning to provide some health care specifically for urban Indians. The number of centers, however, is still very limited.

HEALTH PROBLEMS OF RESERVATION INDIANS

Morbidity and Mortality

Statistics about the state of health of American Indians are available mainly from the Public Health Service and cover mainly reservation Indians.
Life expectancy for Indians born in 1967 is about 64 years. This is the same as the life expectancy for all nonwhites, but it is significantly below the 71 year span for whites (1).

The leading causes of death for Indians and the rates of deaths due to these causes in 1967 are listed below, along with the comparable rates for the total U.S. population (1):

<table>
<thead>
<tr>
<th>Death Cause</th>
<th>Indian</th>
<th>U.S. Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>All causes</td>
<td>863.8</td>
<td>935.7</td>
</tr>
<tr>
<td>Accidents</td>
<td>180.9</td>
<td>57.2</td>
</tr>
<tr>
<td>Diseases of the heart</td>
<td>140.0</td>
<td>364.5</td>
</tr>
<tr>
<td>Malignant neoplasms</td>
<td>70.9</td>
<td>157.2</td>
</tr>
<tr>
<td>Influenza and pneumonia excluding newborn</td>
<td>53.5</td>
<td>28.8</td>
</tr>
<tr>
<td>Certain diseases of early infancy</td>
<td>49.4</td>
<td>24.4</td>
</tr>
<tr>
<td>Vascular lesions affecting the central nervous system</td>
<td>48.8</td>
<td>102.2</td>
</tr>
<tr>
<td>Cirrhosis of the liver</td>
<td>38.9</td>
<td>14.1</td>
</tr>
<tr>
<td>Homicide</td>
<td>19.9</td>
<td>6.8</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>19.4</td>
<td>17.7</td>
</tr>
<tr>
<td>Suicide</td>
<td>17.0</td>
<td>10.8</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>16.3</td>
<td>3.5</td>
</tr>
<tr>
<td>Gastritis, duodenitis, enteritis and colitis, except diarrhea of the newborn</td>
<td>14.5</td>
<td>3.8</td>
</tr>
<tr>
<td>Congenital malformations</td>
<td>13.2</td>
<td>8.8</td>
</tr>
<tr>
<td>All other</td>
<td>181.2</td>
<td>136.0</td>
</tr>
</tbody>
</table>

(NOTE: Rates do not add to totals shown because of rounding.)

Accidents are the major cause of death in Indians and a major cause of death for all age groups except the neonate (1). At present, information is not available classifying accidents as to location, age of victims, or circumstances.

The Aberdeen, South Dakota Area Office, responsible for Indian health in a seven-State area, reports mortality from accidents for calendar years 1969-71 as follows:

<table>
<thead>
<tr>
<th>Total rate</th>
<th>Motor vehicle</th>
<th>All other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indian</td>
<td>200.0</td>
<td>111.4</td>
</tr>
<tr>
<td>U.S. (all races)</td>
<td>54.2</td>
<td>26.2</td>
</tr>
</tbody>
</table>

These data do not separate home, highway, and industrial accidents; motor vehicle accidents associated with alcohol have been mentioned as the leading cause of death among Indians.

The 1967 death rate from diabetes mellitus among Indians was 19.4 per 100,000 population, compared to a 17.7 per 100,000 rate for the U.S. total, 17.3 for the U.S. white population, and 20.8 for all U.S. nonwhites (1). To account for the higher rate in Indian populations compared with the white population, there is a poorly
documented but general belief that Indians have some differences from other races in carbohydrate metabolism.

The importance of diabetes mellitus in maternity patients and its relationship to infant mortality is being studied at the Phoenix Indian Medical Center with support from the National Institute of Arthritis, Metabolism, and Digestive Diseases and the Indian Health Service.

While cardiovascular diseases are important causes of death for Indians, the rates are much lower than for the total U.S. population. Infectious diseases cause greater mortality among Indians than among the total population.

It is further important to note that the Indian death rate from cirrhosis of the liver, the seventh leading cause of death, is 38.9 per 100,000 as contrasted to 14.1 per 100,000 for the total U.S. population. Whether the cirrhosis is of an infectious origin or secondary to alcoholism, it constitutes a major cause of death and disability among Indians.

Morbidity statistics are available for the total Indian population but not for age groups. The 10 leading reportable diseases in 1968 were, in order of frequency: otitis media; gastroenteritis; strep sore throat, etc.; pneumonia, excluding newborn; influenza; gonorrhea; trachoma; chickenpox; mumps; and dysentery, all forms (6). The Public Health Service Orientation Manual for 1971 lists the leading Indian health problems in the following order: communicable diseases among children, accidents, mental health, nutritional deficiencies, alcoholism, problems of aging, and environmental health conditions. The manual states that most illnesses are due to infectious diseases (gastroenteritis, dysentery, influenza, pneumonia, tuberculosis, otitis media, trachoma, measles) (7).

**Maternal Mortality.** Maternal death rates in the United States show the following trends for Indians and other population groupings (1):

<table>
<thead>
<tr>
<th>Year</th>
<th>Maternal deaths per 100,000 live births</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Indian</td>
</tr>
<tr>
<td>1967</td>
<td>33.9</td>
</tr>
<tr>
<td>1966</td>
<td>54.6</td>
</tr>
<tr>
<td>1964</td>
<td>74.2</td>
</tr>
<tr>
<td>1962</td>
<td>89.7</td>
</tr>
<tr>
<td>1960</td>
<td>67.9</td>
</tr>
<tr>
<td>1958</td>
<td>82.6</td>
</tr>
</tbody>
</table>

The downward trend in maternal deaths in the United States is apparent. Maternal death rates for Indians are generally two to three times higher than the rates for the white population,
although they are significantly lower than the rates for all nonwhites.

**Infant Morbidity and Mortality.** The low birth weight rate for Indians, while higher than the rate for the white population, is much lower than the rate for all nonwhites. In 1967 about 8 percent of the liveborn Indian infants weighed 2,500 grams (5½ pounds) or less compared with 7 percent for whites and 14 percent for all nonwhites (1).

More pertinent to this report is the following information from IHS concerning low birth weight rates:

<table>
<thead>
<tr>
<th>Population</th>
<th>Year</th>
<th>Percent low birth weight</th>
<th>Total births</th>
</tr>
</thead>
<tbody>
<tr>
<td>Billings Area</td>
<td>1971</td>
<td>6.9</td>
<td>1,051</td>
</tr>
<tr>
<td>Aberdeen Area</td>
<td>1971</td>
<td>7.3</td>
<td>3,911</td>
</tr>
<tr>
<td>North Dakota</td>
<td>1971</td>
<td>6.3</td>
<td>538</td>
</tr>
<tr>
<td>South Dakota</td>
<td>1971</td>
<td>8.2</td>
<td>1,334</td>
</tr>
<tr>
<td>Indians, U.S. total</td>
<td>1963-67</td>
<td>7.9</td>
<td>109,134</td>
</tr>
</tbody>
</table>

The 1967 infant mortality rate for Indians was 32.2 deaths per 1,000 live births. A comparison with other population groupings is presented in the following table:

<table>
<thead>
<tr>
<th>Population</th>
<th>Year</th>
<th>Infant deaths per 1,000 live births</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Indian total</td>
<td>1967</td>
<td>32.2</td>
</tr>
<tr>
<td>Neonatal</td>
<td></td>
<td>15.3</td>
</tr>
<tr>
<td>Postneonatal</td>
<td></td>
<td>16.9</td>
</tr>
<tr>
<td>U.S. white total</td>
<td>1967</td>
<td>19.7</td>
</tr>
<tr>
<td>Neonatal</td>
<td></td>
<td>15.0</td>
</tr>
<tr>
<td>Postneonatal</td>
<td></td>
<td>4.7</td>
</tr>
<tr>
<td>U.S. nonwhite total</td>
<td>1967</td>
<td>35.9</td>
</tr>
<tr>
<td>Neonatal</td>
<td></td>
<td>23.8</td>
</tr>
<tr>
<td>Postneonatal</td>
<td></td>
<td>12.1</td>
</tr>
<tr>
<td>Aberdeen area</td>
<td>1969-71</td>
<td>24.8</td>
</tr>
<tr>
<td>Neonatal</td>
<td></td>
<td>12.2</td>
</tr>
<tr>
<td>Postneonatal</td>
<td></td>
<td>12.6</td>
</tr>
<tr>
<td>Navajo</td>
<td>1966</td>
<td>45.7</td>
</tr>
</tbody>
</table>


As can be seen, the Indian infant has as good a chance as the white infant of surviving the neonatal period (birth through 27 days). In the postneonatal period (28 days through 11 months), Indian infants are at a risk 4 times as great as white infants and
50 percent greater than nonwhite infants as a whole (1). Post-neonatal death rates for Indian infants are dropping but still are much higher than they should be.

With this information in mind, we should consider the major causes of death in Indian infants. The leading cause of death in the Indian neonate is immaturity; mortality due to this cause in 1966 amounted to 3.1 deaths per 1,000 live births, the same as the white rate (1). In view of the relatively low percentage of Indian infants born at low birth weight and the high percentage of deaths in the first 28 days due to immaturity and its complications, a careful study of maturity of Indian infants at birth should be conducted.

Postneonatal death rates indicate the special vulnerability of Indian infants. The following table compares rates for Indian and U.S. total populations in 1966 (1).

<table>
<thead>
<tr>
<th>Causes</th>
<th>Indian</th>
<th>U.S. total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory diseases</td>
<td>7.1</td>
<td>2.5</td>
</tr>
<tr>
<td>Digestive diseases</td>
<td>3.6</td>
<td>.5</td>
</tr>
<tr>
<td>Accidents</td>
<td>1.9</td>
<td>.8</td>
</tr>
<tr>
<td>Infective and parasitic diseases</td>
<td>1.6</td>
<td>.3</td>
</tr>
<tr>
<td>Congenital malformations</td>
<td>1.3</td>
<td>1.1</td>
</tr>
</tbody>
</table>

**Family Planning**

The birth rate for Indians in 1968 was 38.5 per 1,000 population; the rate for whites was 16.6, and the rate for all nonwhites, 24.2 (1). The Indian birth rate is thus more than twice as high as the white rate and is considerably higher than the nonwhite rate.

In 1963 and 1964, a study was done at the IHS Hospital in Gallup, N. M., concerning the use of intrauterine contraceptive devices (IUD). The IUD was demonstrated to be a successful method of family planning for the large group of women who were mainly illiterate and non-English-speaking and who were having their first experience with birth control and family planning (8).

In many BIA high schools, courses on family life education include information about family planning. In addition, most of these high schools offer Teen-Age Self Improvement courses and mental health counseling. When a school on a Navaho reservation attempted to provide family planning counseling to teenage girls, however, both BIA and parents objected.

Indian cultural values may interfere with adequate family planning services and in some tribes there are religious or cul-
tural objections. It is reported that in one Sioux tribe, a husband
who found that his wife was taking the pill threw the supply
away. Nonetheless, Indians are generally well aware of the need
and desirability of good family planning. More efforts need to be
made to provide a full range of family planning services in con-
junction with general health care for families.

**Dental Care**

Dental care is a major need for Indians. Surveys show that
among the Blackfeet and Fort Belknap Indians periodontal dis-
ease is a major oral health problem and is the main reason for
the high rate and low age at which teeth are lost. Gingivitis is
common, along with a high rate of debris accumulation. Virtually
all the White Mountain Apache preschool children who were
examined had significant dental disease (6).

The IHS dental program has established guidelines for plan-
ning, setting objectives and goals, and carrying out dental care to
Indians. Such programs are based on data regarding epidemi-
ological and environmental factors such as climate, accessibility,
methods of water delivery to communities and the ability to
fluoridate the water which are important considerations in plan-
ing such programs. New careers are being established in the
field of dental therapy. Efforts are being made to train the dentist
to be the manager of a program as well as the provider of care (9).

About 12 years ago an incremental program was started with the
youngest children, and by 1973 most children had been enrolled
in a maintenance program.

While the dental program is good, there is not enough money
to extend the service to all reservation Indians.

**Nutrition**

Malnutrition is another health problem of Indians, especially the
children. The book “Nutrition, Growth and Development of North
American Indian Children” reviewed a number of studies on
Indian children diagnosed clinically or biochemically as having
malnutrition. The incidence ranged from .001 percent to 14 percent
of hospitalized children, with malnutrition being diagnosed as
general malnutrition, anemia or weights below the norm for
chronological age. Nutrition surveys using the norms of the Iowa
and Boston Standards reveal a preponderance of children falling
well below the normal growth rate (6).

In the Billings area during 1967-68, there were 31 child inpa-
tients diagnosed as nutritionally deficient and 341 cases of anemia
in children. Twenty-four of the former cases were attributed to neglect by mothers who were either alcoholic or incompetent. Information from the Aberdeen area revealed a high incidence of infant and preschool anemia.

Studies show that other Americans have been getting taller and heavier with each generation but Indians have not. Only experience with good nutrition will show if American Indians are currently reaching their genetic potential for height. Dietary surveys have revealed mild to marked deficiencies in the intake of a number of specific nutrients. The Apache children had intakes of calories, calcium, riboflavin, vitamin A, and vitamin C that were substantially below those considered to meet normal needs. The survey of Blackfeet and Fort Belknap Indians of Montana, the Dakota Study of eight BIA boarding schools, and the study of Alaska Natives showed deficient intakes of vitamins A and C and calcium and, except among the Eskimos, borderline protein intakes.

The cause for malnutrition among Indians is complex. Eating patterns are affected by food acculturation, limitations in food availability, changes in breast-feeding patterns, and poverty.

All American Indians, including the Alaska Natives, have been forced into extensive food acculturation because of loss of lands, disappearance of game, and hunting restrictions. New foods introduced by trading posts as a result of modern food technology and advertising campaigns have often been low in nutritive values. Flour, sugar, coffee, salt, lard, soda pop, Kool-Aid, candy, and crackers are foods with poor nutritive value that have replaced native foods. Such a high carbohydrate diet also has implications for the extent of dental disease.

Frequently the trading post is the only source of foods, and fruits and vegetables are not available. When the trading post or grocery store is many miles from home, transportation difficult, and refrigeration absent, high carbohydrate foods are apt to be chosen. Welfare recipients may get commodity foods on many reservations but availability depends on current surplus and the local administration. The number of foods deemed surplus is steadily decreasing. Many of the surplus foods are unfamiliar to Indians, and if the women are not taught how to prepare them, they will not be eaten. Furthermore, commodity foods are generally not good sources of Vitamins A and C.

Another serious effect of acculturation of food habits is the increased use of bottle feeding rather than breast feeding. In Alaska it is common to breast feed but frequently only until the child is 2 months of age. Also, a study found a substantial number of infants over 12 months of age on breast milk or formula without supplementary foods. Navajo mothers were breast feeding slightly
over one-third of their infants, and among the Micmac, Ojibwa, and Iroquois, breast feeding has declined both in popularity and duration, with canned milk being substituted almost universally. The decline in breast feeding is a problem because Indian mothers may substitute formula which is hard to prepare sanitarily.

The role of breast feeding in immunological development is still poorly defined. Nonetheless it is known that in developing countries as women become sophisticated and stop breast feeding, both malnutrition and infant mortality increase (10).

The extreme poverty of most Indians is another factor in their poor nutritional status. The average Indian family of five on a reservation is living on an annual income of below $2,000. Many families are receiving welfare but the payments vary from State to State. In Montana the monthly allowance for a family of five is $226 and in Wyoming it is $215. The cost of a nutritionally adequate low-cost diet is computed at $131.24 per month for a family of five (6).

The consequences of poor nutritional status are highly significant. With reduced nutrition status, a child is more susceptible to disease, and the course of the disease is apt to be more difficult. The preschool and school-aged child may reflect poor nutrition by retarded growth. Other complications of states of chronic undernutrition are lowered energy and lessened concentration and attentiveness in the learning situation. If the child has had a poor physical and nutritional start, we can expect his achievement to be poor.

**Sanitation and Housing**

On the Lower Greasewood Reservation in Arizona, 596 (74 percent) of the 808 inhabitants were studied. The average family size was 5.5 persons; 44 percent of the families lived in one-room hogans, 29 percent in primitive two-room houses, and 27 percent in houses of three or more rooms. Thirty-five percent lived in houses without sanitary facilities. Another 41 percent lived in homes with poorly constructed outhouses. Twenty-two percent had indoor toilets. A few families had wells adjacent to their homes; others obtained water from shallow wells, usually some distance from their homes (6).

On the Fort Apache Reservation in Arizona, the families of 200 preschool children were studied. Three-fourths of the families included six or more persons; the majority lived in dwelling units of four or less rooms. One-third had indoor toilets; 85 percent of the families used community piped water, 11 percent used water
from springs, streams, and lakes; and the remainder from wells, cisterns or unknown sources (6).

The lack of a safe water supply and generally poor sanitation is a major cause of infection manifested as gastrointestinal disease (11). The Indians in Region VIII must contend with very severe weather, and for them, adequate housing is particularly important for health. In fact, the combination of unsafe water, inadequate housing and heating, exposure to harsh elements, poor diet and lack of information about hygiene results in an unusually high incidence of infectious disease within the Indian population.

Construction of water supplies and waste disposal facilities are included as part of IHS responsibility (4). Some major efforts have been made to bring Indian sanitation facilities up to standard but much remains to be done (11).

Some efforts had been made to provide adequate housing on the reservation but problems arose. In one instance the Indians failed to pay their housing notes to the Tribal Housing Authority because they were not used to paying for housing, and in some cases their incomes were too low to pay for housing along with their other needs and wishes. Since this solution did not work, many Indians will continue to live in unsafe housing with poor sanitation until a better solution to providing housing is found.

Simply supplying more adequate housing is not the total answer either. When families move to better housing, unfamiliarity with the new housing and equipment (stoves, heating units, sewage disposal) causes accidents. Unfamiliarity and fear may prohibit the Indian from using the new facility effectively, thereby negating the solution of the problem for which the new housing was provided. For example, fear of using the gas heater may mean the family is still exposed to the cold.

A number of other problems exist that have major and direct bearing on the Indian's ability to utilize health services.

**Poverty**

Underlying the poor housing and sanitation as well as many other problems affecting health care for Indians is the problem of poverty. As noted, the average Indian family of five on a reservation is living on an annual income of below $2,000. Welfare payments are generally too low to provide for minimal needs. Unemployment in March of 1970 for Indians 16 years of age and older was 40 percent compared with the national average of 4.4 percent (6). Attempts have been made to establish small manufacturing and tourist businesses on some reservations, but so far this has not
been enough to provide the needed number of jobs, especially in the light of the increasing Indian population.

**Distance and Communication Problems**

The accessibility of services on the reservations is hampered by the great distances and the communication problems. Many patients have to depend on hitchhiking or costly rides from neighbors to get to health facilities. Such dependency frequently makes it impossible to keep appointments.

The Rosebud Reservation (S.D.) tried to establish a bus system. The attitude of the Indians was that this service was a tribal service and should be provided for them free of charge. They therefore refused to pay the fares to support the system and it failed. Phones are scarce on the reservations, although there usually is one available somewhere in each of the communities of any size.

There are still sizeable portions of the older Indian population that do not speak English. Although interpreters are used in the health facilities, there may be much lost in the translation. Language barriers are just an example of the cultural differences between Indian users and non-Indian providers.

**Indian Health Service Problems**

The Indian Health Service has never had enough funds to provide all of the necessary health care to the reservation Indian. Some well-conceived programs cannot be fully implemented and other needed programs simply cannot be undertaken. Some of the facilities cannot accommodate additional health staff that might become available to increase services.

The staff now available to provide health care are quite limited in numbers. In one instance it is reported that a single public health nurse is responsible for 9,000 patients. Lack of funds precludes hiring additional staff, professional or subprofessional. Recruitment of professional manpower is particularly difficult because of the isolated and remote nature of the reservation locations. Once on the reservations, IHS staff suffer from boredom and isolation just as the Indians themselves do. The pending termination of the physician draft will likely increase the difficulty of recruiting physicians.

The monies allotted for hospitalization of patients at offreservation facilities is also inadequate. Every effort is made to utilize Federal hospitals (Veterans Administration, military, Public Health Service) because of the lower hospital per diem cost.
At times the attitude of Indian health personnel, whether they are Indian or non-Indian, can be detrimental to the acceptability of services. When non-Indian staff members come to remote IHS locations, there is some orientation provided as to cultural differences, but this is not generally given by Indian employees. IHS staff are then apt to live in a separate area with superior housing and a totally different life style from the Indians they have come to serve. Little time can be spent in familiarizing the physician who is on a 2-year assignment with the local Indian culture.

This isolation and lack of cultural orientation is apt to lead to inappropriate recommendations from the health providers to Indian patients. For instance, the physician may relate a treatment schedule to three meals a day when the family pattern does not include three regular meals.

**Cultural Barriers**

There are additional cultural barriers which interfere with the effective delivery of health care to Indians. IHS facilities may seem strange and foreign to the Indian users. There are limited numbers of Indians employed in the health disciplines responsible for delivering care; and, when Indians are employed, they tend to be at the nonprofessional and lower-paying levels. There are 38 Indian physicians in the United States, but only four work for IHS. Basic hostilities that may remain between Indians and non-Indians hinder full utilization of services.

Certainly the IHS has made a concerted effort to develop a liaison role by way of the community health representatives. The success of that effort has already been mentioned (p. 4). There is increased involvement of Indians in making the hard decisions around their health services. More intertribal committees and health boards are developing but it would appear that many of them do not as yet have real authority, nor do their members understand their responsibilities in terms of deciding on health programs. Additional education must be undertaken to allow such bodies to function as policy-making boards. Furthermore, there may be some problems around the attitudes of the health professionals themselves, who are simply not used to the idea of consumer involvement in making decisions about health policy. The director of the National Indian Health Board has expressed the hope that the local boards would become more than advisory.

**Jurisdictional Disputes**

One large additional set of barriers to the delivery of health care to Indians is created by jurisdictional disputes.
The Administration's policy holds that reservation Indians as bona fide U.S. citizens should obtain health services from State and local sources, but that the Indian Health Service is responsible as a residual resource for insuring that health services are available and provided to Indians.

The Indian people have taken the position that medical care is a treaty right and the responsibility of the Federal Government alone, so that receiving health services from State and local programs constitutes a threat of termination to them or another example of the Federal Government's shirking its responsibility.

On the other hand, States and local health programs and particularly State medicaid programs are reluctant to extend coverage to reservation Indians since they also consider themselves as residual resources for Indians. Such jurisdictional disagreements have tended to result in failure to maximize limited health care resources to the best advantage. Further, these disputes plus limited funds often result in IHS policies that cause problems for Indians. IHS is accused of "red tape" policies that interfere with the utilization of care when those policies actually are designed to conserve inadequate dollars. Examples include apparently restrictive criteria for eligibility for IHS care, and the requirement for preauthorization when an IHS recipient requires care in a non-Indian setting.

Generally the State health departments' maternal and child health programs (MCH) have assumed that IHS is responsible for and taking care of most of the basic MCH services for reservation Indians in the State. State crippled children's service (CC) agencies have provided services to reservation Indians in a number of instances.

A February 1971 report indicated that the following States spent MCH and CC funds for health services to Indians: Colorado expended $15,000 for Indians, of which $7,000 was MCH money; Montana spent $18,414 for hearing aids, care of cleft palate children, and CC services, primarily for hearing problems. In Lewis and Clark County, Montana, 56 Indian families were served in the Children and Youth (C&Y) project. In North Dakota, 56 Indians received services, which included mastoid operations, for $13,223; in South Dakota it is estimated that 10 percent of the CC money is spent for Indians; four of South Dakota's 12 CC clinics are on or near reservations. In Utah, during 1970, 59 Indians were cared for in the CC program and 2.3 percent of clinic visits were by Indians with an estimated expenditure of $19,000.

In addition, Utah has a contract with San Juan County for generalized service, including family planning for the Navajo Indians. Wyoming spent $12,000 for hearing aids, cleft palate children, dental health and other services.
HEALTH PROBLEMS OF OFF-RESERVATION INDIANS

The health problems of off-reservation Indians, who are generally in urban areas, are very little different from the problems of reservation Indians. There are, however, some areas in which differences occur. Again, we must emphasize that the differentiation of reservation and urban Indians is not a very clear cut one, as Indian populations move back and forth from urban to reservation settings. One consultant told us that a fairly typical pattern would be as follows:

An Indian family moves to an urban setting, locates housing and a job, and appears to settle down. Often homesickness follows and the family remembers the pleasant parts of reservation living. The family is then apt to return to the reservation, giving up the job and housing situation. After a period of time back on the reservation, the family discovers that the nostalgia is not reality. At that point they accept the advantages of urban living and move back to the city and again have to locate housing and employment.

Morbidity and Mortality

We do not currently have specific statistics about the health of urban Indians. A number of efforts are underway to obtain such data.

A study conducted in the Seattle area found that sudden infant death syndrome (SIDS) occurs up to four times as often in Indian infants as in white infants (12).

Poverty

Because unemployment is so widespread on reservations, many Indians go to the cities looking for jobs and a better life. The Indian is apt to be unskilled and the type and quality of education available to him has not prepared him for competition in the city; therefore, he can generally expect to obtain only low-paying jobs.

The Indian needs help in finding a job and may run into difficulties with the usual social service resources, e.g., employment placement and job counseling. First, he does not know that the resources exist; second, he is distrustful of the white man's institutions; and last, some State social service directors and employment department directors do not provide services to Indians because they think that the BIA has this responsibility.
Sometimes the Indian cannot find a job or is laid off, or the pressures of city life break up the family. The urban Indian now faces the many problems of getting welfare assistance, such as, Does he know welfare is available, where it is available, how he can cope with proving eligibility? Does the welfare department think this is a BIA responsibility? Is the worker prejudiced? In many instances, if an Indian applies to an agency for assistance, he is referred to another and then another agency because of the misconception that Indians receive special privileges from the Federal Government and are somehow taken care of (5).

Indians have reported difficulties in getting food stamps. They have no experience with this process on the reservation because food stamps are not available there, although commodity foods are. The inability to get food stamps may seriously hamper their getting an adequate diet.

Transportation and Communication

Distances and transportation problems are perhaps as real for the off-reservation Indian as for those on the reservations. Health care resources, once located, are apt to be a considerable distance away and public transportation in urban settings is hardly responsive to anyone's needs. Communication is easier in the urban setting as phones are generally available. The urban Indian community, though scattered, sets up an effective person-to-person communication system.

Housing

The low-income urban Indian may have as much difficulty in buying adequate housing and may face similar problems with sanitation, safe water supply, and unfamiliarity with new equipment as his brothers on the reservation. In addition, the urban Indian may face racial prejudice in finding housing. In March 1973 a Denver TV station showed a documentary entitled "Why Did Gloria Die?" The heroine of the story, Gloria, had been on welfare and her friends told of inadequate heat, rain that leaked in, electricity that was turned off, and other problems. Other Indians recounted stories of being turned away when looking for housing if the "Indian-looking" husband accompanied the wife on the house-hunting trip. The settings for this telecast were Minneapolis, Detroit, and the midwestern region.
Obtaining Health Care

The Indian who comes to live in the city faces new problems in seeking health care. Familiar with receiving free health services from IHS facilities, he must now learn to find a physician and buy health services. Finding a satisfactory physician in a new city is a problem for many U.S. citizens.

The indigent Indian usually does not use Medicaid because of his lack of knowledge about this source of assistance, his fear of the white man’s institution and because of pride. He may find it difficult to prove eligibility, and the welfare agency may think he is ineligible because IHS is taking care of him.

If the Indian goes to a public facility, he must learn to use identification cards, to respond to questions about income and expenditures in order to prove eligibility and to cope with part-payment mechanisms. In addition, he has the new experience of mingling with patients of other ethnic groups and may be additionally handicapped with transportation problems and language difficulties.

Long waits in clinics and the impersonality of the clinic staff are complaints of the urban Indian. He may also become confused about jurisdictional boundaries for delivery of service, such as the possibility of being eligible for services if he lives on one side of the street but not if he lives on the other.

Cultural Barriers

Most off-reservation and some reservation Indians must use private hospital facilities. The staffs of urban hospitals are usually completely unknowledgeable about cultural differences, community resources, and special Indian needs. Consequently the services offered may not be acceptable to the Indian user. Medical practice in the United States in private offices and particularly in clinics is characterized by impersonality, long waits for service, and brief explanations. For the Indian, whose life style is based on interpersonal relations, this can mean cultural shock.

Jurisdictional Disputes

Jurisdictional disputes, already mentioned above, further disrupt the availability of health care for the urban Indian.

There are some significant problems concerning payment by IHS for care provided to patients who have left the reservation. As a matter of fact, one tribal affairs officer stated that there is a definite polarization in regard to use of IHS dollars between In-
dians who remain on the reservation and those who leave. Some tribal health leaders have voiced strong opposition to IHS having to pay for care for the members who are no longer on the reservation when those funds have to come from the contract health services budget. On the other side, of course, the Indian who has left the reservation may need this coverage to obtain care.

There seems to be a great deal of confusion about Indian students who are eligible for IHS coverage but apparently are expected to return to IHS facilities for such care. Some IHS staff may feel that students who are away from the reservation are not full-time residents eligible for IHS care. The students themselves have great difficulty in getting transportation to service units for health care, and may not be able to pay for private care. Additional problems that students have related include the difficulty of getting eyeglasses, dental care, and psychiatric services. Such problems are obvious barriers to the maximum utilization of educational opportunities by Indian students.

SUGGESTED SOLUTIONS TO INDIAN HEALTH PROBLEMS

The first suggested solution to Indian health problems is that Indian people be maximally involved in the identification of the health problems, their causes and alternative solutions. Experts from various Federal agencies, such as IHS and other components of the Department of Health, Education, and Welfare, the Department of Housing and Urban Development, the U.S. Department of Agriculture (USDA), and others, should provide their expertise in exploring with the Indian people the relationship of various levels of problems to the poor health status of Indian people. The Indians themselves, with this additional expertise available, should establish priorities among the specific health problems to be remedied and participate in decisions about which alternative solutions will be attempted.

Some of the problems identified in this report are not yet fully explored or understood. Continued efforts to understand the problems and to formulate solutions should be an ongoing activity.

Accidents

In view of the prominence of accidents as the major cause of death for Indian populations, we recommend that area offices,
service units or urban Indian centers do a major study of the incidence of accidents, breaking them down into home, motor vehicle and industrial accidents and specifically studying the nature of accidental injuries and deaths for age groupings. Such information would allow the development of a specific accident prevention effort to curb this major cause of morbidity and mortality among Indians.

**Morbidity and Mortality**

The special efforts to combat otitis media should be continued. Other causes of morbidity tend to be due to infectious diseases which are aggravated by the poor living conditions, crowding, lack of health information, and limits of available and acceptable care. Suggested solutions for these problems are presented later in this section.

About 8 percent of liveborn Indian infants weighed 2,500 grams or less compared with 7 percent for whites and 14 percent for all nonwhites, as noted. Although this low birth weight rate does not seem unduly high, Indian infants have a significant neonatal death rate due to immaturity and prematurity. There needs to be some careful assessment of clinical gestational status and comparison with estimated gestational age to try to determine the true incidence of immaturity in Indian infants who may have larger than expected birth weights for gestational age.

Maternity patients' carbohydrate metabolism should be carefully explored in view of the fact that infants of diabetic mothers are apt to weigh more than expected for gestational age but are less mature than expected.

The reported high incidence of SIDS should be documented for Indians. Efforts to inform IHS staff and the Indian people about SIDS and its nature would be particularly important if there are excessive numbers of Indian infant deaths from this cause. All help-givers who are apt to come in contact with this situation need to know the facts about SIDS so as to dispel the guilt associated with such unexplained deaths. As research progresses to define the cause or causes of SIDS there should be particular efforts to apply the research findings to Indian populations.

**Strengthening Maternal and Child Health Services**

Special emphasis should be placed on the health care for mothers and children because “prevention is the most logical and economical approach to health care” (13). While mothers and children are affected by whatever affects the health of the family and the total
population, and though the biological demands of reproduction and of growth and development make them especially vulnerable to health hazards, they are the group which most readily responds to preventive measures. In countries which place a high value on the child, as well as on the benefits of prevention, maternal and child health services form the basic structure around which additional family health services are established.

Since we are addressing the needs of a low-income population who can look back on generations of deprivation, it is important to assist the Indian population in strengthening their basic MCH program. As in developing countries, such a program should be the most inclusive possible and should be undertaken second only to improved sanitation and adequate water supply. An MCH program improvement might well require the following:

1. Reorder priorities in IHS so that maternal and child health activities make further impact on Indian morbidity and mortality.

2. Significantly increase the health care dollars so that acute care needs can continue to be met while MCH program is strengthened.

3. Maximize the acceptability, accessibility, appropriateness, and availability of MCH services to Indian families.

4. Eliminate boarding schools in the interest of mental and probably physical health. It is generally agreed that children, especially young children, fare better living in family units with their parents where they can receive protection, love and guidance from parental figures. Institutional settings are generally detrimental.

5. Include family life education in its broadest sense in the curriculum of all school children from kindergarten through secondary school. Such content must include information about good health habits and attitudes, human relationships, adult responsibilities, parenting skills, etc. As with all such course work, there must be Indian involvement in the design, content, and teaching. Tribal councils, school boards and other influential groups should decide on how much of the traditional Indian culture is taught and how much non-Indian culture is transmitted. Ideally, the content should recognize and build on the strengths of the Indian heritage.

6. Expand and add nurse-midwifery programs to hospital staffs and field services. Nurse-midwives are excellent sources of additional health manpower to work with physicians and other professional personnel in providing maternity care, newborn services and health counseling.
Family Planning

Men and women should be educated about family planning. Some family planning methods are more useful for certain populations than others. Therefore, a variety of medically sound and culturally acceptable methods should be made available to Indian couples. Nurse-midwives may also be used to provide family planning counseling to both men and women, and to provide supervision of interconceptional care.

Dental Health Services

The incremental care program in IHS should be continued. Services might be expanded by purchasing fluoridation equipment and installing it for the water supplies of communities, schools and residential facilities that house children. Topical fluoride applications might be expanded to reach children not presently being served by the fluoridation efforts. Dental care might also be expanded to serve expectant mothers.

Nutrition

Malnutrition is a significant problem in Indian populations on the reservations. Here are some suggestions for improving nutrition:

1. Foods should be made more readily available in an acceptable fashion to the Indians on the reservation.
   a. Provide information to the parents about infant and child nutrition. This could be done by community health representatives or nutrition aides who are taught counseling on foods and nutrition, or by nutritionists.
   b. Make available on the reservation the foods necessary for good nutrition, particularly fruits, vegetables, milk and eggs. Provide adequate transportation so that these foods can be carried home without spoiling, and provide refrigeration at home so that the foods can be properly stored. Further suggestions will be made in the sections on transportation and sanitation and housing.
   c. Protect indigenous foods by various legal and programmatic approaches (14). An example of this is protecting Indian hunting and fishing rights, and protecting the survival of the species which the Indian hunts and fishes.
   d. Expand Head Start and school food programs, which have undoubtedly improved the nutrition of Indian children,
to include free breakfasts and lunches in all schools with a substantial number of Indian students.

e. Consider transfer of the responsibility for Federal food assistance programs from USDA to DHEW. The White House Conference on Food, Nutrition and Health made this suggestion with the hope that DHEW could better assure that foods available through the commodity food program would be chosen on the basis of nutritional needs, cultural patterns and the facilities available for home preparation (14).

f. Require enrichment and/or fortification of foods commonly distributed and sold on reservations (14).

g. Indian tribes should be made eligible for Federal programs that are now available to States. Examples include welfare assistance and food stamp programs.

2. Another set of suggestions has to do with eliminating poverty on the reservation (see also the section on poverty).

a. Expansion of the available income for food, for both reservation and nonreservation Indians, might be possible through the development of cooperatives of buyers' clubs and by the use of home gardens.

b. Reduce the cost of purchased food on the reservations by law and regulate the prices and profits of traders.

3. Since breast feeding is decreasing in popularity among Indian women and this decline may be implicated in excessive gastrointestinal disease in infancy, ways of encouraging and enhancing breast feeding for more adequate periods of time should be undertaken (10). There should be more additional and careful investigation of the role of breast feeding in avoiding milk allergy, gastrointestinal disease, and infection. Of course, in order to make breast feeding successful, the mother's diet has to be nutritionally adequate.

Sanitation and Housing

The problems involving sanitation and housing are difficult for the reservation Indian to solve. Increased income could make it possible for Indian families to buy better housing with safe water and adequate sanitary facilities. It would appear to be important for IHS to continue its efforts to make safe water supplies and sewage disposal systems generally available to reservation Indians. Community health representatives or sanitation aides do and can con-
continue to play an important role in educating Indians about proper sanitation and safe water supplies.

Additional financing by, and increased cooperation with, HUD is a possible route to improvement in housing. Perhaps a housing co-op could be developed on reservations with construction done by the Indians who are trained in these skills. Community health representatives or homemaking aides should be available to help families learn to manage improved housing so that new heating apparatus, refrigerators, and other unfamiliar features are not left unused or do not become hazards to families.

**Poverty**

Poverty is obviously a major, overriding barrier to health care in general. Solutions to poverty have evaded our society for a very long time. Nonetheless, one simple solution for eliminating poverty which has been tried in other countries, but will likely not be tried in the United States, is to simply give each citizen the basic necessities of life, i.e., housing, clothing and food. If this is not possible or not acceptable to reservation Indians, efforts should be made to improve the income of the Indians by maximizing their employment and by increasing the welfare allowance to cover the basic needs.

**Transportation and Communication**

Many of the transportation and communication problems of Indians on reservations result from the fact that Indians live scattered over wide areas. This was not the custom for many Indian tribes before contact with the white man, but was instituted in a futile and unsuccessful attempt to make farmers out of Indians. Before this effort was made, many tribes lived and travelled together in communal fashion. Larger communities of Indian populations would result if adequate jobs and industries were developed on the reservations.

If Indians lived in larger communities, telephones would be more readily available and communication problems would be lessened. Transportation, too, would be a much less severe problem as many of the necessary services for Indians would be readily available in the communities. Indian tribes and their tribal councils should be approached as to their attitudes in this regard, but a solution will require major undertakings around developments of industries and jobs on the reservation.

If it is not possible or acceptable to increase the number of Indians living in communities, another solution for the major
transportation problem is suggested. A thorough study of the current transportation problems, methods, facilities and patterns should be made for a natural service area. This study should not concentrate on transportation patterns for health care, but should include all of the transportation activities, whether individual or group, private or governmental, etc. With this information, some different ways of capitalizing on existing transportation availability might be possible. For instance, there are certain existing vehicles that travel on fairly set schedules, including commercial delivery trucks, school buses, and mail trucks and other Federal vehicles. Such a study might also have implications for the times at which services are offered.

An alternate suggestion is that the model of a bus transportation system used on the Papago Reservation in Sells, Arizona, 65 miles from Tucson, be reviewed for applicability or adaptability to other reservation settings. Also, the Department of Transportation, as a member agency of the Federal Regional Council, should be involved in seeking means of obtaining or leasing buses for reservation transportation systems. Priorities need to be set up through a feasibility study. Such a study would take into consideration such factors as the availability of roads, locations of IHS facilities, existing patterns of transportation for patients without private means, etc. The Health Program Systems Center in Tucson, Arizona, can serve as a source for information with respect to conducting surveys on reservations.

**Indian Health Service Problems**

The Indian people may wish to consider the pros and cons of participation in a national health insurance plan sometime in the future. If such insurance provides for adequate payment for health services for everyone, this would relieve the problem of inadequate funds for buying and providing health services. IHS could then continue to be the health delivery system, and be paid under the national plan rather than by special appropriation.

An alternate suggestion is that sufficient appropriations be made to IHS so that comprehensive health services can be provided for all Indian people living on the reservation.

Staffing is a serious problem for IHS. The staff might be more easily recruited and retained if they were offered special pay categories for hardship locations, additional authorized leave for ongoing education and more vacation time than is normally allowed. Professional staff working on reservations need particular efforts made on their behalf so that they can maintain their professional expertise. Travel costs and time off to attend postgraduate educa-
tion courses, workshops and seminars are important. Another suggestion is that more continuing education be taken to IHS facilities from the medical centers. These types of opportunities could help combat the recruitment and morale problems of IHS employees who live and work on the reservations. Better morale and less loneliness and boredom should result in better health services to reservation Indians.

The non-Indian IHS staff need an adequate orientation to the local Indian culture. This orientation should be by Indians and it should include introduction to important members of the community. Only with this kind of sensitization will IHS staff be able to provide acceptable services to Indians.

There have been some poorly documented allegations about Indians having very significant complaints about the health care they receive but being afraid to report those complaints. In view of the fact that Indians are totally dependent on IHS for their health care, such fear is certainly understandable. There should be an increased, specific effort on the part of IHS staff to establish complaint and grievance mechanisms. Grievances can be heard, investigated and corrected in such a way that both sides learn and gain from the experience.

**Cultural Barriers**

There are, as indicated, major cultural barriers to Indians fully utilizing IHS sources. The orientation of non-Indian IHS staff will help to correct some of these barriers. In addition, it is important that Indian health workers such as community health representatives or medicine men participate in the education of the patient. Medicine men are respected by many Indians for their ability and work in close partnership with physicians. In some instances, additional training is currently being provided to medicine men.

Indian involvement in the delivery of care must be increased. Young Indians should be encouraged to study to become health professionals or paraprofessionals. In order to do this, more Indian educators will need to use Indian role models for children and youth. Indians who are in health delivery roles should have decision-making responsibility wherever possible.

There is more Indian involvement today in decisions about total health care by way of the Indian health boards, councils and committees. Individual members should be given extensive education in the role and function of such organizations. DHEW could perhaps provide some expertise in this effort, either directly or by contract. Once educated, these organizations should be put in truly policy-making positions. It should be mandatory that their
decisions be carried out as long as they are not inappropriate ones requiring medical expertise.

**Jurisdictional Disputes**

Additional services could be provided for reservation Indians if State agencies worked together for maximization of the available services to Indians. For instance, IHS should work closely with the State Medicaid agencies to assure that the early and periodic screening, diagnosis, and treatment are available to Indian children who are eligible for Medicaid, just as required services are available to other eligible children who are residents of the State. An alternate solution is for the responsible health agency to make the services available to the reservation just as it makes those services available throughout the rest of the State. This has recently been done by the Montana State Department of Health and Environmental Sciences in two reservation areas. Other Medicaid provisions should be made available to eligible reservation Indians, just as they are made available to other residents.

It is important that clear-cut statements of eligibility be made for health services and the responsibilities of IHS, State health departments and other health agencies. Indian people should have a voice in establishing these policies, and should be adequately informed about the policies once they are established.

State health department staffs should consider the health needs on reservations as they assess total needs in the State. The Indian people and IHS should then be involved in decisions about whose dollars will be used in what way to address the needs that are found.

Tribal councils are probably eligible for more HEW grants for health services delivery than we realize. As tribal councils and Indian health boards increase their capability and authority, they will be in a better position to make use of such grants.

**Special Problems of Off-Reservation Indians**

First of all, the Indian who leaves the reservation and goes to the city needs a skill that will permit him to earn a decent living. BIA and the Office of Education might cooperate in working out plans for job training experiences for urban Indians.

BIA should continue to expand its program for Indian relocatees. This program includes thorough medical, physical and psychological examinations, employment assistance and accurate, practical orientation for urban living. BIA should continue to monitor the adjustments of Indian relocatees and provide arrangements with
health personnel for their counseling. These activities should be continued until the relocatees and tribal authorities determine to discontinue them.

Vine Deloria, Jr., a Standing Rock Sioux Indian, past Executive Director of the National Congress of American Indians, believes the future of Indian affairs lies with the urban Indian. He stresses that one-half of American Indians already live in cities and more are expected because there are more jobs and opportunities in the city as contrasted to the reservation. Deloria recommends Federal funding for urban center enclaves built near towns and smaller cities. Such centers would provide training and employment placement and should include close coordination with Indian urban centers and individual tribes. An example is the Sioux City Indian Center which is a focal point for coordination of employment, housing, education, and related activities for Indians in four States. This center was established in 1969.

To help the nonreservation Indian get health care, the use of already existing health facilities should be maximized. This would include an agency such as BIA or an Indian center making the relocated Indian aware of the health resources available to him and effecting needed referrals. In addition, members of the Indian center or BIA could accompany Indians to the health facility and guide them through the strange process. The provider staff could receive some inservice education about the culture of Indians, their health needs, problems and community resources. It would also help if clinics and hospitals would hire Indians, who could be trained the same way as community health representatives to do outreach and interpretation to both the Indian patient and health facility staff.

It would be most helpful if Federal agencies carefully monitored any health facility receiving Federal funds to see that Indians are given the services to which they are entitled and that those services are given in courteous and helpful ways.

Another suggestion is that separate health facilities for Indians be established. These facilities could be in connection with an Indian center or urban Indian enclave, or they may be free-standing. The services offered would be those generally needed for good ambulatory health care. Financing would obviously be a problem, but such separate services might be more acceptable to Indians.

If an Indian loses his job or is unable to work, he should be able to receive public assistance. State and local welfare directors should be advised that Indians are eligible for welfare allowances, and the Federal agency should monitor the State agencies just as the State agencies should monitor the local agencies to see that Indians receive the help to which they are entitled. If Indians are
able to get public assistance, they would also be eligible for Medicaid.

This Regional Office receives many calls urgently requesting help in locating and paying for health care. The large number of calls and inquiries warrants consideration of special appropriations to pay for emergency health care, particularly hospital care, for urban Indians when no other source of funds can be found.

**Coordination of Services**

Within the Department of Health, Education, and Welfare a full-time position has been planned for each regional office to provide liaison between other health service agencies and the Indian Health Service. The liaison officer would serve on the staff of the regional health director, with direct responsibility for drawing the health interests of the regional office and IHS closer together. He would also be responsible for seeking, coordinating, and facilitating health services that can be integrated with other funding sources. He would work directly with State health departments, medical centers, and voluntary health organizations in highlighting the needs of Indians for service, discussing their special cultural problems, and helping social agencies who work with Indians become aware of health resources. There is a need to provide such a regional focal point to work with the Regional Councils in matters involving health services for all Indians.
REFERENCES


2. The Indian Health Program of the U.S. Public Health Service, DHEW Pub. No. (HSM) 73-12,003 August 1972.


