

DOCUMENT RESUME

ED 249 035

RC 014 997

**TITLE** California Conference on High Blood Pressure Control in the Spanish-Speaking Community (Los Angeles, California, April 1-2, 1978). Summary Report.

**INSTITUTION** National Institutes of Health (DHEW), Bethesda, Md. High Blood Pressure Information Center.

**REPORT NO** NIH-79-1959

**PUB DATE** Aug 79

**NOTE** 52p.; Conference also sponsored by the State of California Department of Health.

**PUB TYPE** Collected Works - Conference Proceedings (021) -- Reports - Descriptive (141)

**EDRS PRICE** MF01/PC03 Plus Postage.

**DESCRIPTORS** Cardiovascular System; Community Health Services; Data Collection; Disease Control; \*Educational Strategies; Foreign Countries; \*Health Education; Health Personnel; Health Services; \*Hypertension; Legislation; Medical Research; \*Medical Services; Mexican American Education; Research Methodology; \*Spanish Speaking; Special Health Problems

**IDENTIFIERS** \*California; Mexico

**ABSTRACT**

As part of the National High Blood Pressure Education Program effort, the conference explored the implications and impact of the prevalence of hypertension in Spanish-speaking populations in California. Approximately 150 experts in health fields, representing all levels of government, public and private health care providers, consumers, and health care services in Mexico, attended workshops on the collection of hypertension data in the Spanish-speaking community, effective approaches for high blood pressure control, coordination of resources for high blood pressure control programs, educational approaches to high blood pressure control in the Spanish-speaking community, and legislation and hypertension control. Recommendations from the workshops included the following: schools providing professional health training (i.e., medical, dental, nursing schools) within a service area of large concentrations of Spanish-speaking Spanish surname populations must provide cross-cultural training including both bilingual and bicultural elements; legislation must be promoted to emphasize intensive multimedia, public education, and school programs in health education for the Spanish-speaking communities; and programs on weight and obesity, stress and anxiety avoidance, and general health awareness must be promoted among adolescents, with special emphasis on school-based programs. This summary report contains an overview of the material presented, an agenda, recommendations from each workshop, and an overview of each workshop. (NQA)

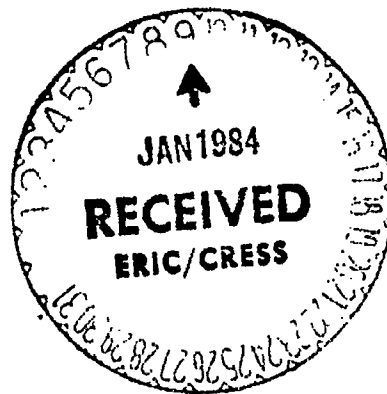
\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

WEC 0 9 1983

ED249035

U.S. DEPARTMENT OF EDUCATION  
NATIONAL INSTITUTE OF EDUCATION  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

- ✓ This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.



California Conference  
on  
High Blood Pressure Control  
in the  
Spanish-Speaking Community

SUMMARY REPORT

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
Public Health Service National Institutes of Health

RC014997



Positions expressed in this publication in no way reflect the opinions of the National Heart, Lung, and Blood Institute of the National Institutes of Health, U.S. Department of Health, Education, and Welfare, or any other agency of the Federal Government.

**California Conference on  
High Blood Pressure Control in the  
Spanish-speaking Community**

**April 1–2, 1978**

**Los Angeles, California**

**Sponsored by the**

**State of California Department of Health**

**and the**

**Ad Hoc Committee on Hypertension in  
Minority Populations**

**of the**

**National High Blood Pressure Education Program**

**National Heart, Lung, and Blood Institute**

**U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE**

**Public Health Service  
National Institutes of Health**

**NIH Publication No. 79-1959**

**August 1979**

# Contents

Page

## PART 1

Introduction . . . . .	1
Conference Agenda . . . . .	2
Recommendations . . . . .	7

## PART 2

Workshops . . . . .	15
High Blood Pressure Research and Evaluation—Concerns in the Spanish-speaking Community . . . . .	15
Effective Approaches for Hypertension Control in the Spanish-speaking Community . . . . .	24
Coordination of Existing Resources for Effective Hypertension Programs . . . . .	27
Educational Approaches to Hypertension Control in the Spanish-speaking Community . . . . .	30
Seminar on the Medical Aspects of High Blood Pressure Control . . . . .	38

## PART 3

Appendices . . . . .	45
A. Conference Planning Committee . . . . .	45
B. Program Participants . . . . .	46



PART 1

Introduction

Conference Agenda

Recommendations

# Introduction

Almost 35 million persons in this country are estimated to have definite high blood pressure (hypertension). These persons face significant risks of heart attack, stroke, and kidney failure.

Present data on the prevalence of this silent killer in Spanish-speaking populations are insufficient. However, health professionals serving these groups consider it a significant factor in morbidity and mortality in Spanish-speaking communities. Therefore, more research and planning for health programs for this population are needed.

In order to explore the implications and the impact of this national health problem in California, the National High Blood Pressure Education Program and the State Department of Health cosponsored the California Conference on High Blood Pressure Control in the Spanish-speaking Community, April 1-2, 1978, in Los Angeles.

According to the planning committee, composed of leading health care providers for the Spanish-speaking community and selected consumer representatives, the goals of the conference were:

1. to provide a forum for exchanging information and ideas about the nature, detection, and treatment of hypertension in the Spanish-speaking community of California;
2. to develop approaches to determine the prevalence of hypertension in the Spanish-speaking community;
3. to provide a mechanism for obtaining required resources for relieving the hypertension problem in the Spanish-speaking community.

Among the more than 150 participants were experts in the health field representing all levels of government, public and private health care providers, consumers, and health care services in Mexico.

Issues discussed at the conference included collecting hypertension data in the Spanish-speaking community, effective approaches for high blood pressure control, coordinating existing resources for effective high blood pressure control programs, educational approaches to high blood pressure control in the Spanish-speaking community, and legislation and hypertension control.

This summary report provides only an overview of the diverse material presented during the conference. This should not be considered a definitive statement on high blood pressure in the Spanish-speaking community. It is instead only a first step toward investigating the problem and considering approaches for improving delivery of health care to this community.

# Conference Agenda

FRIDAY, MARCH 31, 1978

4:00 p.m. to 8:00 p.m.

REGISTRATION DESK OPEN

SATURDAY, APRIL 1, 1978

9:00 a.m. to 12:15 p.m.

OPENING GENERAL SESSION

Crystal Ballroom

Welcome

ALEC VELASQUEZ, M.P.H., State of California  
Department of Health, Session Moderator

ALVIN LEONARD, M.D., M.P.H., State of Cali-  
fornia Department of Health

Opening Remarks

“Health Problems and Health Resources in Cali-  
fornia”

MARIO G. OBLEDO, Secretary, California Health  
and Welfare Agency

“High Blood Pressure Control from the Federal  
Perspective”

EDWARD J. ROCCELLA, Ph.D., M.P.H., National  
High Blood Pressure Education Program

Keynote Address

“Health Issues and Resources for the Spanish —  
Speaking Community”

THE HONORABLE EDWARD R. ROYBAL  
Congressman, 25th District

Presentation

“Hypertension as a Public Health Problem in  
Mexico”

RUY CASTANEDA, M.D., Binational Health  
Group: U.S./Mexico

FAUSTINA SOLÍS, State of California Depart-  
ment of Health, Respondent



12:15 p.m. to 1:45 p.m.

**LUNCHEON—Renaissance Room**

**Luncheon Addresses**

**THE HONORABLE ART TORRES**  
Assemblyman, 56th District

**THE HONORABLE TERESA P. HUGHES**  
Assemblywoman, 47th District

2:00 p.m. to 5:00 p.m.

**CONCURRENT WORKSHOPS**

Crystal Ballroom

**Workshop 1: High Blood Pressure Research and Evaluation—Concerns in the Spanish-speaking Community**

**ROSINA BECERA, Ph.D., Facilitator**

**Speakers:**

**RAMON SALCIDO, Ph.D., "Past Efforts in Research and Evaluation of Hypertension Data"**

**LOUIS RODRÍGUEZ and RON DOWD, Ph.D., "Accumulation of High Blood Pressure Data at the Local and County Level"**

**CALVIN FREEMAN, M.A. and MARCO MONTOYA, Ph.D., "Accumulation of High Blood Pressure Data at the State and Federal Level"**

**Resource Person for Workshop 1:**

**Peter Spenuza, Ph.D.**

Colonnade Room

**Workshop 2: Effective Approaches for Hypertension Control in the Spanish-speaking Community**

**ELIEZER RISCO, M.P.H., Facilitator**

**Speakers:**

**ANTONIO SPAMPINATO, M.P.H., "Community Based Programs"**

**JUANITA SORÍA, "Needs in Relation to Culture, Tradition, and Social Support Systems"**

LUIS FERNANDEZ, Ph.D., "Alternative Approaches for Hypertension Control"

HERLINDA JACKSON, R.N., "Use of Nursing and Allied Health Personnel"

Resource Persons for Workshop 2:

Gabriel Arce, M.P.H.  
Jose Carlos  
Fernando Torres-Gil, Ph.D.  
Andrew Lewin, M.D.  
Carmen Morales  
Alfredo Perez  
Frances Acosta

Galleria Room

Workshop 3: Coordination of Existing Resources for Effective Hypertension Programs

ERNESTO IGLESIAS, M.P.H., Facilitator

Speakers:

ANTHONY M. BRUNO, M.D., "Identifying Resources for Your High Blood Pressure Control Program"

MARILYN McCLANAHAN, M.P.H., and JOSE DUARTE, M.P.A., "Community Coordinating Councils: Strengths and Weaknesses"

CHARLES STEWART, "State Hypertension Advisory Council: How It Relates to the Needs of the Community"

Resource Persons for Workshop 3:

Adelbert L. Campbell, M.A., M.P.H.  
Manuel Jaques  
Richard J. Rodríguez  
Ventura Huerta, M.P.H.  
Tomas Estrada

6:00 p.m. to 7:30 p.m.

NO HOST SOCIAL HOUR—Galleria Room

SUNDAY, APRIL 2, 1978

9:00 a.m. to 11:00 a.m.

Athenian Room

**CONCURRENT WORKSHOPS**

Workshop 4: Educational Approaches to Hypertension Control in the Spanish-speaking Community

MARGO DE LA VEGA, M.P.H., Facilitator

Speakers:

AMELIE G. RAMIREZ, M.P.H., "El Asesino Silencioso: A Methodology for Alerting the Spanish-speaking Community"

RUTH MUÑOZ, P.H.N., "Practical Nutritional Approaches to Hypertension Control in the Spanish-speaking Community"

Resource Persons for Workshop 4:

Jean Mathison  
Elicia Luck, M.P.H.  
Pamela Martindale, M.P.H.  
Jane Luna, R.N., M.S.  
Barbara Yamasaki, P.H.N.  
Jose Montez

Roman Room

Workshop 5: Legislation and Hypertension Control

GILBERT OJEDA and JOSE DUARTE, M.P.A.  
Facilitators

Speakers:

GILBERT OJEDA and JOSE DUARTE, M.P.A.,  
"Accountability: The People's Role/The  
Legislator's Role"

THE HONORABLE TERESA P. HUGHES  
and BALT YANEZ, "Existing, Pending, and  
Proposed Legislation"

JUAN LÓPEZ, M.P.H., "Rural/Urban HSAs  
and High Blood Pressure Control"

Resource Persons for Workshop 5:

Ralph Ochoa  
Roberto Carrillo  
Luis Garcia, M.P.H.  
Alec Velasquez, M.P.H.  
Tomas Estrada

Colonnade Room

Workshop 6: Seminar on the Medical Aspects  
of High Blood Pressure Control

Panelists:

JAVIER E. GARCIA DE ALBA, M.D.  
RAMON ALVAREZ GUTIERREZ, M.D.  
STAN PADILLA, M.D.  
RAMON RODRÍGUEZ, M.D.

12:00 noon to 1:30 p.m.

LUNCHEON—Gold Room

Luncheon Address

THE HONORABLE JOSEPH MONTOYA  
Assemblyman, 60th District

1:30 p.m. to 3:30 p.m.

CLOSING GENERAL SESSION

Gold Room

Presentation of Recommendations to the Reactor  
Panel

Panelists:

THE HONORABLE TERESA P. HUGHES  
FAUSTINA SOLÍS  
ANNIE R. COLLINS

Adjournment

# Recommendations

## **WORKSHOP 1: HIGH BLOOD PRESSURE RESEARCH AND EVALUATION: CONCERNS IN THE SPANISH-SPEAKING COMMUNITY**

1. National health statistics on Hispanics be recorded and compiled pursuant to PL 94-311, by end of fiscal year 1979.
2. Development of more data in California on Hispanic populations be linked to service delivery programs.
3. Consultations and technical assistance be required for all future research (including impact study currently being conducted) in the Spanish-speaking community.
4. If samples are to be selected, they must include the three generations, and assumptions about this population must be justified and clearly defined.
5. More funds be provided for research in health and hypertension in Spanish-speaking communities.
6. At the state level, because Mexican Americans are largest minority, all vital statistics be broken out according to that category.
7. All recommendations from this conference be communicated to the governor of California.
8. The governor of California communicate to the Secretary of the U.S. Department of Health, Education, and Welfare the urgency of these conference recommendations.

## **WORKSHOP 2: EFFECTIVE APPROACHES FOR HYPERTENSION CONTROL IN THE SPANISH-SPEAKING COMMUNITY**

1. Schools providing professional health training, i.e., medical, dental, nursing schools, within a service area of large concentrations of Spanish-speaking/surname populations must provide cross-cultural training including both bilingual and bicultural elements.
2. Agencies providing information and referral services to Spanish-speaking/surname populations must be required to provide intensive training to their client contact staff on effective approaches of interpersonal communication, followup technique, and sensitivity to the target population characteristics.
3. Legislation must be promoted to emphasize intensive multimedia, public education, and school programs in health education for the Spanish-speaking communities.

4. This conference should demand implementation of PL 94-311 at the Federal and state levels, to ensure that the data base of the health problems and expectations of the Spanish-speaking communities be realized.
5. Health status, disease indices, and similar studies subsidized by Federal and state funds must conform to affirmative action guidelines from the planning, implementation, distribution to utilization phases.
6. Programs on weight and obesity, stress and anxiety avoidance, and general health awareness must be promoted among adolescents, with special emphasis on school-based programs.
7. Materials development in multimedia approaches to health education must receive intensified and increased support, similar to the efforts that have gone into bilingual education curriculum.
8. A national education and supplemental support program similar to WIC must be developed if preventive and control programs in hypertension are to be more effective among the low income and fixed income populations.
9. Third-party payors, especially Medical and Medicare, must include reimbursement for preventive, maintenance, and educational high blood pressure services.
10. Task force must be created out of this conference to ensure continuous effort toward implementation of recommendations, long range planning for future conferences, and ensure appropriate participation in the 1979 National Conference on High Blood Pressure Control, with a section on hypertension among the Spanish speaking.

### **WORKSHOP 3: COORDINATION OF EXISTING RESOURCES FOR EFFECTIVE HYPERTENSION PROGRAMS**

1. The U.S. Department of Health, Education, and Welfare Region IX office, when forming hypertension advisory groups, should utilize existing state advisory group resources to obtain input for planning and program review processes.
2. The state establish a central clearinghouse for disseminating high blood pressure information.
3. Hypertension program publication expenses be absorbed by the state hypertension program.
4. This conference go on record in support of the bills of Assemblyman Hart and Senator Gregorio related to authorization of advance payments to contract clinics/ programs.

5. This conference shall ask the California Heart Association to include in their monthly newsletter information on current state and Federal legislation related to hypertension.
6. This conference support pending legislation that simplifies the contract process for community projects.
7. This conference endorse the efforts of the State of California Department of Health that is developing a bilingual and bicultural screening, education, and data collection program for the Hispanic population. Results of the data collection should be published in Spanish, and disseminated to the Hispanic population.
8. The State Hypertension Advisory Council conduct public hearings on their state high blood pressure plan. Said hearings should be held in areas accessible to the Hispanic population so that they can review and comment on the state plan.
9. The state should examine the funding situation of existing hypertension advisory councils, prior to funding new councils.
10. The state should encourage the use of current resources and the involvement of Chicanos in the development of hypertension education programs in the Hispanic community. These programs should be designed to encourage community residents to learn CPR and first aid so that emergency primary care is available in crisis situations.
11. This conference should urge the passage of appropriate legislation to provide advance payments to community-based contractors to facilitate start-up and operation of community health and high blood pressure programs.
12. Whereas there are several states that provide money for high blood pressure control services, the State of California Department of Health supplement existing Federal dollars for high blood pressure with state dollars to expand, improve, and coordinate community hypertension programs.
13. Local community high blood pressure control programs be urged to involve themselves with their local Health Systems Agencies in the development of HSA plans, with particular emphasis on providing input from Spanish-speaking and other minority and medically underserved communities.

#### **WORKSHOP 4: EDUCATIONAL APPROACHES TO HYPERTENSION CONTROL IN THE SPANISH-SPEAKING COMMUNITY**

1. Provide technical assistance in evaluating the East Los Angeles Adult Education Program, conducted by Ruth Muñoz, R.N., through the Garfield Adult Education unit, in order to develop a model in adult high blood pressure education for the Hispanic community.

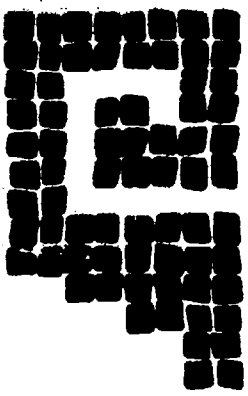
2. Develop a Spanish-speaking film for national distribution on the general aspects of hypertension. Then provide modified films on more specific aspects of hypertension (e.g., diet) that are geographically and culturally relevant to Spanish-speaking communities. Due to the urgent need for these films, at least one film should be produced by the end of 1978.
3. The State of California Department of Health's High Blood Pressure Program must work with the National High Blood Pressure Education Program to compile an updated directory of all HBP programs aimed at Spanish-speaking communities. Then develop a handbook on model patient education programs to guide development of future hypertension education programs for Spanish-speaking communities. The handbook should include a list of resources, bibliography, available materials, films, and techniques for planning, programming, implementing, and evaluating programs.
4. Encourage the State of California Department of Health to facilitate the establishment of HBP adult education programs for the Spanish-speaking community through the adult education system.

#### **WORKSHOP 5: LEGISLATION AND HYPERTENSION CONTROL**

1. Whereas the California Conference on High Blood Pressure in the Spanish-speaking Community recognized Spanish-surnamed people represent 20 percent of the population in California and \$700,000 a year is made available to the state for hypertension research, 20 percent of the monies be specifically designated for hypertension research in the Spanish-speaking community.
2. HSA should be encouraged to develop special task forces to focus on high blood pressure control among Hispanics and other minorities. The task forces should develop program coordination for prevention, detection, and public education.
3. Legislation be introduced at the state level to revise AB 4001 for health services programs to specifically address the needs of medically underserved populations in the area of health promotion.
4. Legislation be introduced as an amendment or revision to PL 93-641 (Federal level) specifically addressing hypertension education in the Spanish-speaking community, and this education be provided bilingually.
5. Request the development of culturally relevant materials on hypertension from both state and Federal level for the Spanish-speaking community.
6. A team from the California Conference on High Blood Pressure in the Spanish-speaking Community rewrite in Spanish a letter regarding hypertension, which is being sent out by the Public Health Service.
7. State Advisory Health Council not approve the Statewide Health Plan unless specific provision is made to address health needs in Spanish-speaking communities, including hypertension-related disorders.

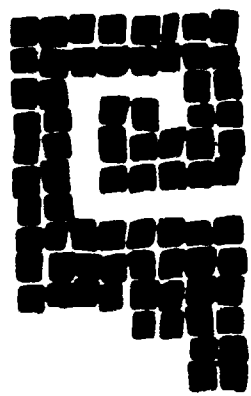
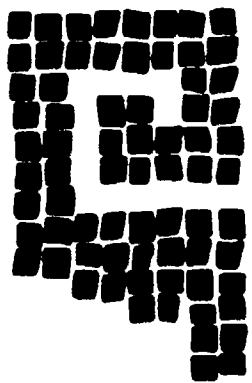
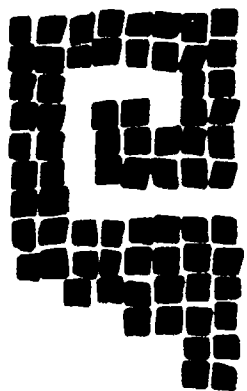
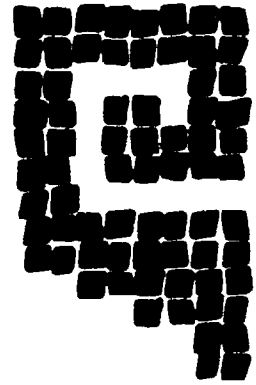


8. Pilot studies be implemented and funded in minority communities, particularly for the Chicano and Black populations, pursuant to Article 8.5 of the California Health/Safety Code. Proposed legislation should be sponsored as an amendment to existing legislation.
9. We go on record opposing the Willie Brown Bill, which provides for removal of ethnic identification from birth certificates.
10. There shall be Chicano professional and community input into the Impact Study on High Blood Pressure currently being implemented by the State of California Department of Health, i.e., methodology, research design, fielding the study.



## PART 2

### Workshops



# Workshops

## **WORKSHOP 1: HIGH BLOOD PRESSURE RESEARCH AND EVALUATION—CONCERNS IN THE SPANISH-SPEAKING COMMUNITY**

**Facilitator:** Rosina Becera, Ph.D.

**Speakers:** Ramon Salcido, Ph.D.; Louis Rodríguez; Ron Dowd, Ph.D.; Calvin Freeman, M.A.; and Marco Montoya, Ph.D.

**Resource Person:** Peter Spenuza, Ph.D.

### **Past Efforts in Research and Evaluation of Hypertension Data**

High blood pressure (HBP) is recognized as a mass public health problem in California which, if untreated, is a major contributor to heart disease, stroke, kidney disease, and related cardiovascular morbidity and mortality. Although high blood pressure can be effectively controlled by antihypertensive medication, such treatment is not always utilized and followed appropriately.

Of the approximately 13 million adults living in California, an estimated 2.3 million have high blood pressure. Based on national data collected by the National High Blood Pressure Education Program (NHBPEP), it is estimated that at most only 71 percent of all adult Californians with this disease are aware of their condition; and of those, only 40 percent are being effectively treated. Thus, of the 2.3 million adult hypertensives in California, only about 633,000 persons have adequately controlled HBP. Although these figures represent an improvement over statistics reported 4 to 5 years ago, they still indicate the need for increased efforts in HBP control.

Despite the pervasiveness of this disease, little is known about hypertension among Mexican Americans. Research on hypertension has neglected this large and significant population. The State of California Department of Health concurs, as stated in a 1976 report: "Since most of the interest has been in observing Black and White differentials, very little is known of other racial and ethnic groups."<sup>1</sup> This discussion will examine what little research has been done on hypertension among Mexican Americans, and will suggest directions research should take to fill in the gap.

### **A Statistical Picture**

The Mexican American population represents the second largest identifiable minority group in the United States and the largest in the Southwest. According to a documentary by the National Broadcasting Corporation on Mexican Americans, demographers project it will be the largest minority in the 20th century.<sup>2</sup> The population statistics published in *The Agenda*, a La Raza publication, point to the same conclusion. Using various statistical references from many national Hispanic organizations, *The Agenda*

estimates the nation's Mexican American population to be over 15 million.<sup>3</sup> This estimate varies from the 11.2 million figure given by the U.S. Bureau of the Census for March 1976.<sup>4</sup> In California alone, the number is estimated to be 3,179,000; and Los Angeles County numbers 1,890,000 Mexican Americans among its residents.<sup>5</sup>

Los Angeles figures are indicative of the density of Mexican Americans in the cities. Eighty percent of Mexican Americans live in urban areas where they are employed in blue collar jobs, rendering them at high risk for hypertension.<sup>6</sup> But their below-poverty-level incomes insure they will only infrequently see a doctor, and the scope of hypertension problems among them remains invisible. A 1974 statistical comparison between below-poverty-level Mexican Americans and Anglos provides the telling point of the invisible hypertension problem among Mexican Americans: 8.9 percent of Whites reported below-poverty-level incomes compared to 23.2 percent of persons of Spanish origin.<sup>7</sup>

Other statistical comparisons between Mexican Americans and Anglos show a discrepancy between the youthful Mexican American population and their mortality rate. Analysis of the age distribution shows the Mexican American population to be younger than the Anglo population. The median age of Mexican Americans is 20.7, compared to 28.6 years for the overall population; yet Mexican Americans have a higher than average mortality rate.<sup>8</sup> The 1975 census showed the proportion of Mexican Americans 65 years of age or older was only 4 percent, compared to 10 percent for the overall population.<sup>9</sup> Bearing in mind the higher mortality rate and the lower-than-poverty-level incomes of the large, urban Mexican American population concentrated in blue collar jobs, the following is an overview of studies on the health status and hypertension among this population.

### Health Status

At least two decisive factors make Mexican Americans high risk candidates for hypertension. One is their low socioeconomic status and the other involves the barriers erected against them by the health care system. As pointed out in the statistical picture, Mexican Americans fall far short of Anglos in both income and health status. Gilbert and Rourke's study of rural poverty and the Los Angeles health system cited in Aranda's article bears this out. The study shows the morbidity and mortality rates among Mexican Americans to be two to three times higher than the White population.<sup>10</sup> Aranda reports that the incidence rates for most reportable diseases are higher in East Los Angeles, a predominantly Mexican American area, than in any other Los Angeles County health district. Tuberculosis and death rates were higher in East Los Angeles than in Los Angeles County as a whole. He also reported a high incidence of bacterial and parasitic infections, communicable diseases, circulatory diseases, and accidents. Despite these high rates of disease, infection, and accidents, East Los Angeles and other Mexican American health districts bore low rates of medical attention and hospital admissions.<sup>11</sup>

The high disease rate left unattended may be partially attributed to the barriers the health care system erects against Mexican Americans. Mexican Americans who do

not speak English face a language barrier in clinics that pay no attention to ethnicity and language. They run into legal barriers as well. Restrictions on citizenship make some members of this group ineligible for public health and welfare benefits. Although all groups have health problems, the low socioeconomic status and lack of access to the health care system make Mexican Americans a high risk health group.

## Health Studies

Weaver (1972) provides a useful categorization of research on Mexican American health care behavior. He describes three generations of research orientation: 1940, anthropological; 1950, parochial; 1960, emergence of the Chicano.<sup>12</sup> All three generations of research find cultural barriers to the effective utilization of modern health care among Mexican Americans. This discussion will focus on the research studies done on accessibility to health care services.

Cervantes holds stereotypes about Mexican Americans responsible for providing an excuse for the health care system to ignore this community's health needs. The health care system fails to attend to their health needs on the basis of the stereotype that Mexican Americans prefer traditional folk culture practices, such as using curanderos and brujas or drinking herb teas, to modern medical practice. Martin and Martinez take up the question of Mexican American reliance on traditional folk culture practices in their studies of the Chicano health care system. They conclude that: "Participation in the system of folk beliefs and curative practices by no means precludes reliance upon physicians and use of medical services and health problems not defined by folk concepts."<sup>13</sup> Many Mexican Americans participate in two insular systems of health care. Martin and Martinez advocate a reconciliation of both systems if health care is to be effective. Health service in the Chicano community must be personalized, relevant, and reflective of the culture of this community.

More recent research reveals more pragmatic reasons for the failure of Mexican Americans to use health care systems. Welch and associates found that their lack of usage of health facilities was primarily due to the socioeconomic status of the community rather than the individual. In scrapping the stereotypes in favor of the facts, research turned up concrete reasons for the failure of Mexican Americans to make full use of modern medicine. Language difficulties, inability to pay for services, and dehumanizing experiences evident in large health bureaucracies militate against Mexican Americans employing modern medical practice to its fullest extent.

## Hypertension

Knowledge of circulatory disorders dates back to the 17th century. While acknowledging the wealth of medical research in studying the etiology of hypertension, there will be no attempt to review it here. Instead, the focus will be on the emotional and socio-cultural aspects extant in the Mexican American population, which figure so prominently in hypertension research in other populations.

Several studies explain the etiology of hypertension. Large scale epidemiological studies have yielded statistical evidence confirming the long held suspicion that hypertension runs in families.<sup>14</sup> Besides being a genetically transmitted tendency, obesity can predispose people to hypertension. Not only are obese people more likely to become hypertensive, but normal weight hypertensives are more likely to become obese.<sup>15</sup> Diet also plays a primary role in hypertension. Excessive sodium intake has been identified as an important factor in maintaining a sustained elevated level of blood pressure.<sup>16</sup>

But not all hypertension is attributable to physical characteristics. Hypertension has been traced to personality characteristics as well. Stress and repressed aggression can predispose an individual to hypertension.<sup>17</sup> All the literature agrees that hypertension is best controlled by early detection. Critical to timely discovery and control of hypertension is access to health care. The poverty and cultural conditions of many Mexican Americans put health care out of reach and stand in the way of early discovery and control of hypertension.

More recent studies add to the store of causes of hypertension. Some of these studies have shown social variables to be linked to hypertension. Specifically, the studies found that:

1. An inverse relationship exists between socioeconomic status and hypertension. The higher the class, the lower the prevalence of morbidity and mortality rates.
2. Regardless of occupation and class, non-Whites were found to have a higher mortality rate from hypertension than Whites.
3. Among all races, laborers have the highest mortality rate from hypertension.
4. A significantly higher prevalence of hypertension was noted in urban dwellers than rural.
5. Males have a statistically higher incidence of hypertension than do females.
6. A marked differential exists between races for age, with both male and female non-Whites showing a greater mortality rate in every group than Whites in the same category.

The results of these studies suggest that hypertension is mainly a disease of urban-based minorities. A review of the extensive literature of hypertension shows the same. A high prevalence of this disease is associated with ethnicity or race. In fact, hypertension among Blacks is not only more prevalent, it is also more severe.

Yet there is curiously little research available on hypertension among Mexican Americans, and what little is available shows a remarkable lack of understanding of the Mexican

American community and its culture. As described in the preceding health sections, research must take into account inability to pay for services, the language difficulties encountered in seeking them, and the impersonality of the medical bureaucracy in studying health issues among this community. The failure of the scanty research on hypertension among Mexican Americans to account for these significant variables has resulted in skewed perceptions of the hypertension problem among them.

The only research conducted on hypertension among Mexican Americans, by Stern and associates, is a prime example of lack of knowledge of Mexican American culture in studying their health. Stern investigated the influence of income level on cardiovascular risk by comparing Mexican Americans to Anglos residing in the three northern California rural communities of Watsonville, Gilroy, and Tracy.<sup>19</sup> The researchers' rationale for selecting these rural communities was "each of these communities contained a sizable number of Mexican Americans."<sup>20</sup> The 1970 census shows Watsonville to have 14,569 Mexican American residents; Gilroy, 12,665; and Tracy, 14,742.<sup>21</sup>

The researchers were not aware that 80 percent of the Mexican American population lives in urban areas of southern California, with the heaviest concentrations in Los Angeles and San Diego. The 1959 to 1961 hypertension mortality rates in the United States show the urban based to have a higher death rate than the rural based for both sexes.<sup>22</sup> Considering Mexican American population density in southern California cities and earlier research finding a higher hypertension mortality rate for city dwellers, Stern's rationale is invalid and the study too narrow in scope. Stern's research made no attempt to explore social variables such as stress, attitude toward hypertension, and knowledge of and accessibility to health care. A comparison between urban-based Mexican Americans and Anglos measuring not only the influence of income but also stress, beliefs about hypertension, and availability of health care would have been much more appropriate.

Inappropriate location is not the only flaw in Stern's research. Failure to differentiate varying segments of the Mexican American population did not lead to any new facts. The total random sample was generated from a directory of city addresses organized by street name. Although all members of the sample were workers, no distinction was made between permanent residents and transient campesinos and migrant workers. Nor did the sample systematically stratify first generation Mexican-born and second generation American-born members. All sample participants underwent a medical history, an extensive dietary questionnaire, measurements of height, weight, and blood pressure. Other tests included plasma, cholesterol, and triglyceride concentrations, and a 12-lead electrocardiogram. However, the researchers did not indicate whether or not the questionnaire could be understood by Spanish-speaking people or if bilingual interviewers administered the tests. Such essential information is not even reported as part of the research plan.

The conclusion of the research demonstrated a difference between Mexican Americans and Anglos in occupational level, education, and family income level, as anyone could have predicted. It also observed that plasma, cholesterol levels, and high blood

pressure were the same for both Mexican Americans and Anglos. The same research sample reached opposite conclusions: cardiovascular risk status of the Mexican American is similar to Anglos of the same region; but Mexican Americans have a higher prevalence of obesity, like other low socioeconomic groups, in contrast to individuals of higher socioeconomic status.

In conclusion, the defects of the Stern research can be enumerated in hopes of preventing them in future studies of hypertension among this group. The Stern research shows a lack of knowledge of Mexican American culture, and suffers from stereotypes which view Mexican Americans as an undifferentiated population regardless of length of residency or level of U.S. acculturation. The faulty methodology failed to differentiate between varying significant segments of the Mexican American population, failed to ensure that subjects understood the questionnaires, chose an inappropriate location to conduct the study, and neglected to include the very cultural variables known to be associated with hypertension. Neglecting to take cultural variables into account hampers efforts to recognize the true scope of hypertension problems among the Mexican American population. Therefore, the following factual inferences may be drawn from the Stern research and recommended for future research in this neglected area:

1. Research must be sensitive to the values of the Mexican American culture.
2. Samples of the Mexican American population must include first and second generations to be truly representative.
3. Bilingual, bicultural interviewers should collect data.
4. Assumptions the study makes about Mexican Americans should be clearly stated.
5. Members of the studied communities should advise researchers on different lifestyles and values of each community.

With these prescriptions closely adhered to and clear, careful methodology free of bias and accounting for all variables, three questions are suggested for future research:

1. Is there a difference between first and second generation Mexican Americans in the incidence and prevalence of hypertension?
2. What factors hinder the Mexican American from using hypertension services?
3. What is the relationship between lack of opportunity and success in hypertension treatment?

#### Federal and State Data Collection

There are two main sources of Federal and state population data. The Bureau of the Census, through the decennial census, uses enumeration for government recording of the size of a population and its characteristics at a given time within a given area. The



National Center for Health Statistics, through vital statistics, uses local registration of specific personal events to include birth, changes in civil status, changes in health status, and death (generally recorded at the county level and inclusive of age, sex, and cause).

Since the early 1900's the Federal Government has sought to guide local registration procedures. In addition, it sought to collate vital statistics where registration was estimated at least 90 percent complete. The Federal effort sought to develop model registration laws for state enactment. In 1880, death-registration areas were developed, followed in 1915 by a birth-registration area—comprising those states with acceptable technical standards. An overview of the recent past includes:

1. Death statistics on a national level have only been available since the 1930's.
2. The data system depends on a voluntary cooperation between states and the Federal Government.
3. Data accuracy and registration completeness vary by state and region.

Petersen (1961) points out that mortality data are fragmentary. The admission of the 48th state to the death-registration area in 1933 meant that mortality data on a national scale could be developed. The causes of death, as recorded on death certificates, are compiled into county, state, and national vital statistics. Most often the cause of death is recorded by a physician. In recent years as many as 25 percent of signed death certificates have not had a clear medical opinion of cause of death.

National health data have been accumulated at the Federal levels since the 1930's. Health data regarding the Spanish-speaking population have only in the past decade been systematically collected, estimated, or collated. While most evident from the 1970 census, Hispanic census data have not been Federally cross-tabulated with vital statistics to produce a significant inventory of Hispanic health status, the quality of care provided the Hispanic community, or the adequacy of preventive health measures existing within the Hispanic population. At a general level, data on high blood pressure accumulated at the state and thus Federal level are at best representative of White (inclusive of Hispanics) and non-Whites.

#### Federal HBP Data Collection Efforts

A brief review of Federal hypertension data resulting from past national health surveys indicates no specifically published reports on the Hispanic community.<sup>23</sup>

The only public source of survey data on blood pressure in the Hispanic community (which includes only two tables) is part of the Health and Nutrition Examination. This survey, conducted 1971-1974, involved a national probability sample of 20,749 persons aged 1 to 74 years. The 1971 to 1974 sample was defined as White (88 percent),

Negro (11 percent), and other (1 percent). In this sample, Whites included self-identification as Spanish American or Mexican American, and were recorded Mexican Latin or Spanish American. By reconstituting the probability sample for minorities, Hispanics made up 4.4 percent, Negroes 11 percent, and nonreservation American Indians, 1.8 percent (N = 17.2 percent). The specific findings reported under the heading of "ancestry" showed that mean systolic and diastolic Spanish-Mexican American blood pressures increased with age and were higher for men. Because the sample was small, only for ages 65 to 74 were the differences large enough for addressing statistical significance.

Data for systolic and diastolic blood pressure are presented by sex and age interval for children (age 6-11), youth age (12-17), and adults (18-74). Data are also presented for adults by sex and age interval for Whites, Negroes, Spanish-Mexican Americans, and American Indians. In addition, data are available by sex and age interval for Whites and Negroes by region, income group, education level, and population density.

#### State Data Collection Efforts

In California, there are presently two ongoing data collection efforts with regard to hypertension in the Spanish-speaking community. The first is a statewide survey of 6900 households, 1250 of which are Spanish-speaking. The purpose of the survey is to measure the impact of a statewide hypertension coordination effort. Data will be collected on hypertension prevalence rates and levels of awareness in these communities, as well as other health-related information. These data will be incorporated into the state's needs assessment efforts. A resurvey is planned in 3 years.

The second effort involves evaluation of the state's hypertension control projects. Each time a patient visits one of the 17 high blood pressure control projects, data are recorded on such things as the patient's blood pressure reading, demographic information, and kinds of health care services provided. On a monthly basis, these projects collect data on the number of persons screened, number of persons detected with elevated blood pressures, referral and followup information, and the number of outreach contacts.

#### References

1. State of California Department of Health, *California State Plan for High Blood Pressure Control*, I, 1976.
2. National Broadcasting Corporation, *The Latin Wave*, January 30, 1978.
3. National Council of La Raza, *The Agenda*, III, No. 2 (Mar./Apr. 1977), p. 5.
4. U.S. Bureau of Census, March 1976.
5. Community Development Department of Los Angeles.

6. *The Agenda*, p. 6.
7. *The Agenda*, p. 6.
8. U.S. Bureau of Census, 1975.
9. *The Agenda*, p. 6.
10. *The Agenda*, p. 6.
11. Robert G. Aranda, The Mexican American Syndrome, *American Journal of Public Health*, IXI (January 1971), 104-109.
12. Jerry Weaver, Mexican American Health Care Behavior: A Critical Review of the Literature, *Social Science Quarterly*, 1972, pp. 84-102.
13. C. Martinez and H. Martin, Folk Diseases Among Urban Mexican Americans, *Journal of the American Medical Association*, CXCVI (April 11, 1966), 161-164.
14. Jan Howard and Barbara Holman, The Effects of Race and Occupation on Hypertension Mortality, *Milbank Memorial Fund Quarterly* (July 1970), p. 265.
15. Howard, *Milbank Quarterly*, p. 289.
16. Howard, *Milbank Quarterly*, p. 289.
17. Mario Garcia-Palmieri, Risk Factors and Prevalence of Coronary Heart Disease, *Circulation* (September 1970).
18. "Hypertension in Blacks," *Ebony* (July 1973), pp. 28-79.
19. Michael P. Stern, William L. Haskell, Peter D. S. Wood, Kathryn E. Osann, Allen B. King, and John W. Farquhar, Affluence and Cardiovascular Risk Factors in Mexican Americans and Whites in Three Northern California Communities, *Journal of Chronic Diseases*, XXVIII, 1975.
20. Stern, *Affluence*, p. 625.
21. Stern, *Affluence*, p. 625.
22. Iwoa Moriyama, Diane E. Krueger, and Jeremiah Stamler, *Cardiovascular Diseases in the United States*, Vital and Health Statistic Monographs. American Public Health Association (Massachusetts: Harvard University Press, 1971).
23. A complete discussion of Federal efforts to collect HBP data was presented in a paper prepared by Dr. Marco Montoya, Division of Extramural Research, National Center for Health Services Research, Rockville. The paper, Accumulation of High Blood Pressure Data at the Federal Level, is available from the Minority Programs Component, National High Blood Pressure Education Program, 120/80 National Institutes of Health, Bethesda, Maryland 20205.

## **WORKSHOP 2: EFFECTIVE APPROACHES FOR HYPERTENSION CONTROL IN THE SPANISH-SPEAKING COMMUNITY**

**Facilitator:** Eliezer Risco, M.P.H.

**Speakers:** Antonio Spampinato, M.P.H.; Juanita Sorfá; Luis Fernandez, Ph.D.

**Resource Persons:** Gabriel Arce, M.P.H.; Jose Carlos; Fernando Torres-Gil, Ph.D.; Andrew Lewin, M.D.; Carmen Morales; Alfredo Perez; and Frances Acosta

### **Community Based Programs**

Although it is generally accepted that hypertension is a significant problem in the Spanish-speaking community, many of these hypertensives are not under treatment. Many Spanish-speaking Californians reside in medically underserved areas where a number of social ills prevail, such as a high rate of unemployment, poor housing, and inadequate day care services. Too often these communities are both economically depressed and environmentally deteriorated. Educational levels and health awareness are low.

The U.S. Bureau of the Census and independent surveys show that Spanish is the primary language of many adult members of families in these communities. As a result, many are unable to read and/or understand information on the location and availability of health care services, such as free blood pressure screenings. In addition, these persons are usually uncomfortable if not able to communicate with health care workers. This jeopardizes the possibility of establishing a sound physician-patient relationship. As a result, many persons in Spanish-speaking communities are reluctant to use available medical services.

High blood pressure is an affliction of individuals who live in individual communities. It is in these communities, with community leadership, that the action must take place. Spanish-speaking communities must accept the challenge to identify and effectively treat members of their own population who are hypertensives. It is important that these communities implement appropriate, not necessarily unique, high blood pressure control measures.

The decision to establish a community based high blood pressure control program should only be made after careful consideration of issues and problems involved in its development and operations. Some of the basic issues to be addressed include the following:

1. Is such a program needed?
2. What is the magnitude of this problem in this community?

3. What population groups are affected?
4. What is the geographical distribution of the population?
5. Is there seasonal distribution (as in the case of migrant workers)?

The success of a community based high blood pressure control program is related to the adequacy of planning for this effort. This not only requires careful analysis of community needs, objectives, and resources, but also involvement, agreement, and commitment by both health care providers and consumers.

Once it is determined that a community based high blood pressure program is needed, it is important to assess the community's level of understanding about hypertension, and any ongoing efforts to control it. Appropriate available resources should be used as much as possible.

#### Essential Services

It is important to identify particular services needed to support high blood pressure control in Spanish-speaking communities. At least 14 services are essential to these community based programs:

1. Educate consumer/patient about:
  - a. What they need to do and how to do it.
  - b. High blood pressure and its consequences.
2. Educate health care providers about:
  - a. What they need to do and how to do it.
  - b. High blood pressure and its consequences.
3. Develop opportunities for detection.
4. Measure blood pressure and determine if it is elevated.
5. Conduct patient history, lab, and physical examination.
6. Diagnose high blood pressure.
7. Prescribe and adjust therapy as needed.
8. Fill prescriptions.
9. Recheck blood pressure periodically.

10. Monitor therapy.
11. Make appropriate referrals.
12. Monitor and follow-up each referral.
13. Reinforce consumer/patient success.
14. Solve consumer/patient problems related to high blood pressure control.

It is in the best interests of all concerned to hire qualified persons from the Spanish-speaking community who have appropriate bilingual skills and cultural sensitivity. At no point in hiring staff should health-related skills be compromised. Such a practice is a definite disservice to the community.

The program should be housed in a facility that is centrally located. In addition, there should be enough rooms for private consultation, examination and treatment, office staff requirements, and other necessary space. Attention directed to such provisions undoubtedly results in increased use of the facility and, ultimately, better delivery of health care.

### **WORKSHOP 3: COORDINATION OF EXISTING RESOURCES FOR EFFECTIVE HYPERTENSION PROGRAMS**

**Facilitator:** Ernesto Iglesias, M.P.H.

**Speakers:** Anthony M. Bruno, M.D.; Marilyn McClanahan, M.P.H.; Jose Duarte, M.P.A.; and Charles Stewart

**Resource Persons:** Adelbert L. Campbell, M.A., M.P.H.; Manual Jaques; Richard J. Rodriguez; Ventura Huerta, M.P.H.; Tomas Estrada

#### **Identifying Resources for Your High Blood Pressure Control Program**

Congress has appropriated \$11 million to the Bureau of Community Health Services (BCHS) under Section 314(d) 7b of the public law. This funding for programs in hypertension control is allocated to the state on a formula grant, with no stipulation as to how this funding must be used.

In fiscal year 1977 more than \$260,000 was allocated to the State of California. This amount was increased to approximately \$650,000 in fiscal year 1978.

The Bureau of Community Health Services also supports primary health service delivery programs such as community health centers, neighborhood health clinics, migrant programs, rural health initiatives, and maternal and child health. The bureau expects that the comprehensive health services provided will include prevention and control of patients with hypertension or any other targeted disease.

BCHS also has developed specific guidelines which will be distributed to all state and territorial health offices. These guidelines will interpret the legislation and the intent of Congress to 6,000 ongoing projects in the U.S. and its territories. These materials are being distributed to providers in communities where health service delivery programs are ongoing, to provide technical assistance in developing programs aimed at hypertension detection and control.

In addition, the bureau has started to work with individual states to assist them in developing community based statewide plans for prevention and control of hypertension. Through this innovative approach, the bureau is attempting to integrate the resources available throughout the community. This means being able to work with the most geographically isolated communities and ensuring that those clinics and facilities are tied into primary, secondary, and tertiary care centers. This will make it possible for a patient or a physician in a given community to have continual contact with specialized health centers.

#### **Community Coordinating Councils: Strengths and Weaknesses**

The High Blood Pressure Council of Los Angeles came into existence in 1973. Its 18-member board of directors includes representatives from agencies in Los Angeles

County; state-funded projects; Department of Health Services; Los Angeles County Medical Center; hypertension, detection, and followup programs; and some consumers. Although more than 70 organizations in Los Angeles now interact with the council, future plans include expanding the membership to include representatives from the business community, industry, and perhaps more consumers. Within the council, four task forces function in the areas of professional education, public relations, fund raising, and inter-agency coordination. At this time, there is only one Mexican American on the council's board of directors. However, future emphasis will be placed on increasing the number of Spanish-speaking consumers on both the council's board of directors and the task forces.

Until last fall, the council has been mostly an educational organization involved in distributing literature to the community, referring people to places for free blood pressure screenings, and providing information on current high blood pressure research efforts. In the future, the council plans to work more closely with health care providers to help them determine what their needs are. Even though the council has served as a clearing-house of information for Los Angeles County, it does not have materials specifically directed to the Spanish-speaking population. This will be remedied by revising existing materials and by developing new literature. In addition, the interagency coordination task force is developing a catalog of resources in Los Angeles County, which will be available on request.

#### State Hypertension Advisory Council: How It Relates to Community Needs

The State Hypertension Advisory Council has supported the creation of an office within the State of California Department of Health to focus on high blood pressure control efforts throughout the state. Toward this end, the council has adopted an advocacy role to obtain the statutory authority for such an office.

The council also has assisted in allocating available funds for high blood pressure control activities through the use of technical review panels. Members of these panels are either identified by council members or by the state agency, and have responsibility for reviewing proposals submitted for funding. There are 17 projects now in existence. None received more than \$35,000; most received less than \$30,000. The council is trying to get high visibility for high blood pressure activities throughout California with very limited dollars, given the level of services needed.

The council also works with staff of local councils, providing guidelines for evaluation of ongoing local projects. It has examined the current role of local councils and developed an outline for use in evaluating their effectiveness. In addition, the council has urged the formation of two new councils as part of the overall strategy, one in San Diego and one in Sacramento.

At the present time, three major task force efforts are ongoing within the council:

1. methodology—considers various ways of dealing with the problem of hypertension;



2. **evaluation—develops methods of reviewing activities in local projects, the state plan, and necessary activities for the future; and**
3. **program development and implementation—works to get programs established and functioning.**

**Future plans include developing new sources of funding, both at the local level and through resources inside and outside the government. More consumer participation in council activities will also be encouraged.**

#### **WORKSHOP 4: EDUCATIONAL APPROACHES TO HYPERTENSION CONTROL IN THE SPANISH-SPEAKING COMMUNITY**

**Facilitator:** Margo de la Vega, M.P.H.

**Speakers:** Amelie G. Ramirez, M.P.H.; and Ruth Muñoz, R.N.

**Resource Persons:** Jean Mathison; Elicia Luck, M.P.H.; Pamela Martindale, M.P.H.; Jane Luna, R.N., M.S.; Barbara Yamasaki, P.H.N.; and Jose Montez

An adult health education class in Los Angeles provides much needed health education information on HBP through a nutritional approach to hypertension control. Many of the students, who range in age from 30 to 84 years old, are recent immigrants from Mexico and often are not well educated. Classes are conducted in Spanish and attract from 70 to 80 persons each week. The site of the class is a Los Angeles County facility adjacent to a clinic. When students enroll in the class, their blood pressures are measured and recorded by the clinic staff. Approximately three-quarters of the students have high blood pressure. All students keep individual records of their blood pressures; some students have even lowered their pressures since their initial enrollment in the program.

There is a dearth of health education materials written in Spanish. However, every attempt is made to use available community resources such as nutrition pamphlets from the American Heart Association which are translated into Spanish. Convenient household supplies and samples of foods are used to emphasize the importance of nutrition and weight control, as they relate to high blood pressure. Students learn to speak some English as they are taught to read food labels to determine salt and calorie content. Some sessions are also devoted to discussions of techniques for preparing fresh food at home versus use of processed food. Emphasis is placed on learning to eat traditional Mexican food while maintaining a proper nutritionally balanced diet.

In the sessions on general medication for hypertension, students are encouraged to be more assertive in dealing with their physicians, to ask for clarification of instructions when necessary. They are also taught to take their medication daily, to store medicine properly, and to read labels on medicine containers. No specific drugs are discussed.

When the program was first established, students were referred from community health screening programs. Now many come to the program as a result of word of mouth. Although students receive certificates of completion at the end of the semester, many return to the class the next semester. The program planners have found that attendance is increased by calling beforehand to remind students to come to class, rather than by calling after they miss class. The latter approach is often translated as an insult. In addition, letters from their physicians encourage them to participate.

The health professionals working in this program feel that health education is not merely passing out reading material. In fact, the written word may not always be the

best medium for learning. The best rule appears to be that if you present students with material that is culturally relevant and applicable to everyday life, they will continue to come for more information. Furthermore, because funding is so limited, the class uses available community resources, including people as well as materials. This is one example of how adult education can play an important role in health education.

### **El Asesino Silencioso: A Methodology for Alerting the Spanish-speaking Community**

To develop effective health information and/or education programs in the area of cardiovascular disease (CVD), the following must be understood about the target population: mechanisms of communications, motivation, and modification of behavior; existing health knowledge, attitudes, and practices; and their sociocultural background, needs, and interests.

To obtain this type of information, Baylor College of Medicine's Public Education Section in Houston, Texas, conducted a community survey. The purpose of the community survey was to establish for Baylor's National Heart Center a data base for designing future health education programs for the Houston community. Through the community survey, existing knowledge, attitudes, and practices related to CVD and its associated risk factors were determined, as well as the media habits of Houston area adults 18 years of age and older. The primary random sample consisted of 2,322 Houston residents, with appropriate proportional representation of the ethnic composition of the survey area (69 percent Anglo, N = 1,605; 23 percent Black, N = 547; and 8 percent Mexican American, N = 170).

The survey indicated that the Mexican American population was significantly less knowledgeable concerning the impact, nature, and control of cardiovascular diseases than the Anglo population with which it is generally combined. For example, only 13.9 percent of the Mexican American (N = 170) versus 22.2 percent of the Anglo (N = 1,605) respondents identified hypertension as a primary risk factor associated with heart disease.

Survey results also underscored the potential role of the mass media in health education programs designed to ameliorate this problem. More than 46 percent of the Mexican American respondents cited some form of mass media (television, radio, newspapers, or magazines) as their primary source of health information, compared to 35 percent who cited their physician. Television in particular, cited by 24.1 percent, surfaced as an important channel for reaching this target population with health information.

Based on these data, a 6-week mass media hypertension information campaign was developed to increase awareness of, and positive behavioral response to, the problem of high blood pressure among the Mexican American community in Houston. A standardized health education program methodology was employed to guide campaign design, implementation, and evaluation. This methodology involved salient audience characteristics, both cognitive and motivational; delineation of appropriate message appeals and media; establishment of audience vulnerability; and demonstration of the need for action.

Survey results also revealed that a serious lack of even the most basic knowledge regarding heart disease exists in several adult subpopulations in the Houston community. When asked to identify the six behavioral habits or characteristics associated with increased risk of cardiovascular disease, 78.8 percent of the Anglos surveyed correctly named more than two of these risk factors, with the highest percentage of respondents naming three. In contrast, only 54.8 percent of the Mexican Americans named two or more of these risk factors, with the highest percentage of respondents naming only one or two factors. Of particular interest is the fact that hypertension was cited by only 13.9 percent of the Mexican American, versus 22.2 percent of the Anglo respondents. Finally, only one-third of the Mexican Americans could name one or more of the warning signals of a heart attack, compared to slightly more than half of the Anglo respondents.

In general, however, the community survey data related to cardiovascular disease health knowledge clearly revealed that a substantial portion of the Mexican American community does not even possess the fundamental knowledge prerequisite to begin adopting risk-reducing behaviors.

In contrast to differences in knowledge and attitudes noted between the Mexican American and Anglo respondents, reported health care practices were quite similar. Approximately two-thirds of the Mexican American and Anglo respondents reported having a physical checkup at least once a year. An even greater percentage, 80.6 percent of the Mexican Americans and 84.3 percent of the Anglos, reported having their blood pressure checked within the last year. While on the surface these results are impressive, further analysis underscored the fact that regular medical visits, in this case for blood pressure checks, were not necessarily correlated with increasing knowledge. This is substantiated by the fact that 62.8 percent of the Mexican Americans surveyed, compared with 45.6 percent of the Anglos, were not told what their blood pressure was. The majority of the respondents, 88.4 percent of the Anglos and 74.7 percent of the Mexican Americans, indicated that they receive their regular health care from their doctor. However, Mexican Americans tend to rely more heavily than Anglos on public health clinics for health services.

Already certain auxiliary channels play an important role in disseminating health information. Only 22 percent and 35 percent of the Anglo and Mexican American respondents, respectively, cited their doctor as their primary source of health information. Of these populations, 59.5 percent and 47.0 percent, respectively, cited some form of mass media (i.e., television, radio, newspapers, magazines) as the primary source of such information. Television, cited by 24 percent of the Mexican American respondents, ranked highest among mass media sources, followed by the newspaper at 13.8 percent. These results are in contrast to the Anglo responses. Although both groups cited heavy reliance on mass media for health information, the credibility associated with these sources is relatively low. Of all mass media, magazines were cited as having the greatest credibility in the health information area for both groups, while television followed as the second most accurate source.

Respondents were also questioned about the utilization of special media as sources of health information, such as brochures and pamphlets. Of those surveyed, 50.6 percent of the Mexican Americans and 43.4 percent of the Anglo respondents reported that they picked up free health brochures. Furthermore, more than three-fourths (86.1 percent, Anglo; 80.6 percent, Mexican American) of the Mexican American and Anglo respondents indicated that receiving such information from their doctor or other credible health agencies, such as the American Heart Association, in the mail addressed to them would increase their willingness to read it. The survey data indicated that the potential of the mass media in health education may be actualized through an effective linkage between mass media impact and medical authority credibility.

Based on the survey results, a Community Health Information Program was designed, which is referred to as CHIP. The overall aim of the program is to demonstrate the effectiveness of the systematic utilization of appropriate methods and media to stimulate increased awareness of and behavioral response to the problem of high blood pressure by a specific target audience.

The first step in the CHIP approach was to identify the Houston Mexican American community as the target audience. This group was selected because of its need for preventive health information on CVD as documented by the community survey results, and the need for additional studies to further document the health status and behavior of this ethnic group. The community survey results provided a foundation for developing a systematic health education program based on known rather than assumed audience needs, characteristics, and media utilization patterns.

Next, the program goals and objectives were identified. The primary goal of the program was to develop and evaluate a replicable communications model designed to increase awareness of and behavioral response to the problem of high blood pressure among Houston's Mexican American population. Specific objectives included:

1. To determine message content based on target audience's knowledge, attitudes, and practices related to CVD and its associated risk factors, particularly high blood pressure.
2. To determine message language and appropriate motivational appeals via focus groups conducted with representatives of the defined target audience.
3. To disseminate messages in accordance with documented media habits of the target population.

The third phase of the methodology consisted of conducting additional fact-finding research to determine message appeal and appropriate media selection for disseminating messages to the target audience. This research and fact-finding consisted of two focus group sessions with representatives from the target population. A focus group is an informal session in which several participants are asked to discuss in their own words all aspects of a specified topic or subject matter. The discussions are monitored by one or

more professionals and the entire session is taped for more in-depth review. Such groups are designed to gain more insight and understanding of the target audience's frame of reference about a specific topic.

The focus group's input was instrumental in clarifying subjective areas such as appropriate language and culturally relevant appeals. When such data were coupled with the objective data from the survey, this information provided a more comprehensive picture of the intended audience. The sessions are also analyzed for terminology, expressions, and other verbal communications that may surface. This information provided useful guidelines for program and message design.

The two focus group sessions were conducted in Spanish, and consisted of a series of questions designed to determine appropriate message content, media, and evaluation procedures. Participants also viewed a series of health-related television public service announcements that illustrated various media appeals (i.e., testimonial, fear arousal, endorsement). The participants were asked to react and comment on each of the spots.

With respect to the message, focus group results underscored the importance of cultural relevance in both language and content. Specifically, the participants stated that the messages should be in Spanish and should focus on the Mexican American's concern for self and family. The importance of both audience identification and perceived vulnerability emphasized the need to incorporate some element of fear in the messages. Participants reported media habits which corresponded with those documented in the community survey and emphasized the importance of the local minority television station.

When questioned about requesting additional health information, participants suggested calling a specific telephone number because this would provide an easy, immediate channel for feedback. In addition, they suggested that a bilingual person should answer the telephone requests, and that the information provided should be free.

Phase IV of the methodology was media selection. Based on the survey and focus group results, television was selected as the most appropriate medium for the awareness stage of the program. Public service announcements (PSA's) were selected for disseminating the message. Although PSA's involve low-cost production techniques, time constraints inherent in the PSA format severely limit the scope of the message content. Therefore, the messages focused on making the audience aware of the problem and providing them with an avenue for action.

In the CHIP program, a telephone feedback channel provided information on available free materials about hypertension. A bilingual (Spanish and English) printed brochure reinforced the information provided to the audience. Unlike broadcast media, this printed format was more ideally suited to presenting detailed factual information concerning hypertension, or any other health problem, as well as methods of control. The brochure emphasized that the first step in detection or control of hypertension is

a blood pressure check. The brochure also listed health facilities that give free blood pressure checkups and additional medical care.

The evaluation component of the methodology was one of the most important steps because it allowed for accurate assessment of the program's impact. CHIP's penetration and effects, in terms of target population awareness of the PSA's and reported behavioral responses, were measured through a separate sample pretest/post-test survey implemented before and after the program's implementation.

The preprogram measurement provided baseline data against which the effects of the mass media campaign could be gauged. Specifically, this phase consisted of a random telephone survey of adults, 17 years old and older, in 500 Harris County Mexican American households to determine target population awareness of the problem of high blood pressure, sources of awareness, and relevant health behaviors.

After the 6-week campaign was completed, an identical postmeasure was conducted with a separate random sample of 500 Mexican American telephone households. This measure allowed assessment of market penetration of the television PSA campaign and resulting effects.

In the next phase, program implementation, CHIP was produced and implemented over a six-month period. Planning for the program involved a comprehensive, budget, production, and implementation schedule to insure completion of the project by the deadline. Based on the results of the target population research, three television PSA's were designed and produced in Spanish. A professional media consultant group, including television and radio public service directors and other mass media personnel representatives of the target population, was organized and convened periodically throughout the campaign design to guide the development of message content and format. This cooperative planning effort was designed not only to obtain program ideas but also to secure the active involvement of these key media persons in the initial planning stages. Their involvement ensured maximum media support in terms of public service air time during the actual program implementation.

Incorporating information and ideas gleaned in both the mass media consultant and Mexican American focus groups, the concepts, scripts, and story board for the three Spanish PSA's were developed by the Public Education Section staff.

Audio recordings of each script and detailed visual story boards were developed and incorporated in a pretest with another Mexican American focus group. The purpose of the pretest session, which was conducted in Spanish, made it possible to determine the understandability of the language and messages; the appropriateness of the scenes and subject matter; and the selection of the telephone call-in response system. Results of the pretest were very positive, with only minimal changes in the wording of the script. Final scripts and story boards were also reviewed and endorsed by the media consultant group prior to production.

Volunteer talent from a local Mexican American drama group was recruited for the characters in the spots and for the recording. A professional cinematography firm produced the final film and videotape of the spots.

The three PSA's were designed to maximize audience identification with and involvement in the message. A Mexican American announcer and actors were used in all the announcements to enhance source credibility. Based on input from both the lay and professional focus groups, the messages were designed to increase the viewers' perceived vulnerability by drawing them into dramatic scenes in which the "silent killer," high blood pressure, was lurking. The announcements were motivational versus informational in nature. The spots were designed to motivate the audience to take a specific action. In this situation, this meant calling for additional information on high blood pressure control. At the conclusion of each spot, the audience was encouraged to call the telephone number given for more information.

The respondents who telephoned for more information were mailed a bilingual brochure on high blood pressure. Input from a final lay Mexican American focus group was obtained regarding the format of the brochure. In addition, Mexican American professionals from various health and education fields were recruited to serve as consultants in the development of the brochure. Their recommendations, coupled with the focus group and survey data, were incorporated into the brochure which described the dangers of high blood pressure, outlined methods for controlling this disease, and provided a list of locations where a free blood pressure check could be obtained.

Since no readability formulas could be located for Spanish texts, the Flesch and SMOG formulas were applied to the English version, indicating that the brochure was on a sixth grade reading level (36.5 percent MA reading level, sixth grade or above).

The campaign spots were aired for 6 weeks beginning in early January. This time was selected because of the postholiday decline in commercial advertising which increased the availability of public service air time. The announcements were aired a total of 224 times during this period on all local television stations (one devoted evenings to Spanish programming).

A telephone line with two rotating numbers was installed and maintained throughout the campaign to provide a feedback channel for the population response. The telephone line was staffed 12 hours a day by bilingual interviewers who recorded the respondents' names and mailing addresses.

At the end of the campaign program, the postevaluation was administered. This led to the next step in the methodology: results. Comparison of the precampaign and postcampaign survey results revealed that over one-third (35.6 percent) of the target population surveyed (N = 500) reported awareness of one or more of the campaign PSA's on television.

Based on the data obtained from the program evaluation, the spots did not require revisions, which is the last item in the methodology. Furthermore, the spots have been



adopted by the Texas Heart Association for statewide distribution. The Seattle Heart Association has also requested the English version of the spots.

In conclusion, this methodological approach proved to be an effective mechanism for developing target specific media messages to reach the Spanish-speaking community in Houston. These procedures also served as useful guidelines for the development and replication of similar health education programs to meet the health education needs of other target populations in other communities.

## **WORKSHOP 5: SEMINAR ON THE MEDICAL ASPECTS OF HIGH BLOOD PRESSURE CONTROL**

**Speakers:** Javier E. Garcia de Alba, M.D.; Ramon Alvarez Gutierrez, M.D.; Stan Padilla, M.D.; and Ramon Rodríguez, M.D.

At this seminar, technical aspects of high blood pressure and its treatment and control were discussed. Much emphasis was placed on recommendations found in the *Report of the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure*. This document is available from the High Blood Pressure Information Center, 120/80 National Institutes of Health, Bethesda, Maryland 20205. [Request DHEW Publication No. (NIH) 77-1088.]

### **Classification and Dangers of Hypertension**

High blood pressure (hypertension) is classified as either essential or secondary. In essential hypertension, the more common of the two forms, the etiology (cause) is unknown. In most cases, essential hypertension can be controlled to prevent or reduce serious cardiovascular consequences. Early diagnosis and control improve the outlook for longer survival with less complications. Secondary hypertension results from some other underlying disease or condition such as primary aldosteronism, pheochromocytoma, etc. In such cases, high blood pressure is usually corrected or cured by treating the causative disease or condition.

Hypertension is a progressive disease. In its early stages, it produces no symptoms requiring medical attention and can only be detected by BP measurements. If left undetected or untreated, the disorder becomes progressively worse and, after years of stress on the cardiovascular system, results in major complications involving such organs as the eyes, heart, brain, and kidney. Damages to these organs occur as a result of hardening and narrowing of the arterioles and arteries, thrombosis or embolism (blockage of blood vessels, for example, by clots), or rupturing of blood vessels and hemorrhaging. The severity of damage to the organs depends on the severity of the vascular blockage or hemorrhaging, as well as the area of organ involved.

### **Detection of HBP**

Blood pressure levels are not static but are variable within limits in most persons. That is the reason considerable care must be exercised in measuring blood pressures to ensure the most accurate readings. Those measuring blood pressures must be properly trained, whether they are health professionals, paraprofessionals, or lay persons. In addition, the BP measuring instrument should be reliable and properly calibrated periodically for accuracy. For obese patients, a larger sized cuff is usually required, while children require a smaller sized cuff.

Each patient should be given sufficient time to relax before BP's are taken. The patient should be seated and resting comfortably in a quiet room with his or her arm

suitably bared. Both systolic and diastolic blood pressures should be measured each time. Because the first BP readings during each occasion could be considerably higher than the person's true resting BP values, it is important to repeat the measurements two or more times and record the average values. At each occasion, the subject should be informed in writing of the numerical values of his or her SBP and DBP. (Subjects who do not receive their BP values should request them.)

It is important to reassure patients with elevated BP's on the first occasion that a single BP reading does not constitute a diagnosis of HBP, but does indicate that further evaluation is required. Patients should understand the importance of following the recommended actions appropriate for their BP levels, which follow:

<u>SBP/DBP (mm Hg)</u>	<u>Recommended Action</u>
DBP 120 or higher	All persons: prompt evaluation and treatment.
160/95 or higher	All persons: confirm BP level within 1 month.
140/90 to 159/94	Under age 50: have BP checked within 2-3 weeks. Age 50 or older: have BP checked within 6-9 weeks.
DBP below 90	All adults (18 years or older): have BP checked yearly.

During the BP confirmation visit, it is important to take two or more BP measurements seated and at least one standing. Specific therapy should be prescribed only after:

1. At least two confirming elevated BP levels are recorded on separate occasions or unless the initial DBP is greater than 120 mm Hg.
2. Taking a comprehensive, hypertension-oriented medical history, which should consist of any previous history of HBP or its treatment, cardiac or renal disease, stroke, the use of birth control pills or other hormones, and other cardiovascular risk factors such as diabetes, cigarette smoking, a high salt intake, lipid abnormalities, or family history of HBP or its complications. Information obtained from a patient's medical history may provide some insight into the duration and severity of his or her HBP, as well as uncover contributing factors such as social habits and inherited family diseases.
3. A complete, HBP-oriented physical examination, which should include in addition to two or more BP measurements (one standing), a recording of the height, weight, pulse rate, and examination of the eyes, neck, heart, lungs, abdomen, and extremities.
4. Basic laboratory tests, which should include: hematocrit, urinalysis for protein, blood, and glucose, creatinine and/or blood urea nitrogen, serum potassium, and electrocardiogram. Other tests which may be helpful are the chest x-ray, blood sugar, serum cholesterol, serum uric acid, microscopic urinalysis, and blood count.

Without alarming the patient with HBP, it is important that he or she clearly understands the following:

1. Hypertension is a serious disorder or illness that generally cannot be cured, but usually can be controlled.
2. The dangers (premature complications, disability, and death) associated with inadequately treated or uncontrolled HBP.
3. The importance of adhering to the regimen prescribed by the physician, including medication, to maintain lifelong BP control.
4. The asymptomatic nature of the disease.
5. The importance of keeping followup appointments.

### Therapy

As outlined in the previously mentioned *Report of the Joint National Committee*, nearly all patients with diastolic pressures of 105 mm Hg or more should be treated with antihypertensive drugs. Studies indicate that drug therapy does make a difference in terms of reducing morbidity and mortality in such patients when blood pressure is maintained at or near normotensive levels.

Treatment of patients with diastolic pressures from 90 to 104 mm Hg should be individualized. For some patients, weight control and reduced salt intake may lower blood pressure. However, for the Mexican American community, this therapy raises certain questions. For one thing, no data are available on what is the "ideal weight" for this or any other ethnic group. All groups are forced to use so-called American ideal weight charts. This may pose a problem for Spanish-speaking groups who may not easily fit into the American standard.

### Prescribing Medications

Some people experience no side effects from taking antihypertensive medications, while others do. Generally, the milder the medication, the fewer the side effects.

Side effects vary from one drug to another. Possible side effects include such things as drowsiness, fatigue, nasal congestion, swelling of tissues, depression, heartburn, nightmares, insomnia, diarrhea, loss of sexual drive or performance, nausea, vomiting, nervousness, or rash. When side effects occur from taking antihypertensive medication, they should be reported to the physician.

It is the responsibility of the physician to warn the patient of possible side effects. If a patient is not informed and experiences unexpected side effects, he or she may not visit the physician again for further treatment.

In prescribing drugs, it is important that the regimen be as simple as possible. Physicians should be careful not to mislead patients into thinking a pill must be taken

at a specified time or some serious problems will arise. Instead, the blood pressure should be controlled with the lowest dosage of the drug possible, and should require the least amount of time and effort to follow the prescribed treatment regimen.

Noncompliance is a serious problem in the Mexican American community. In many instances, this problem is directly related to the level of education of the patients, particularly education about high blood pressure as a disease, its complications, treatment, and prevalence in their community. As with other groups, Mexican Americans also have misconceptions about high blood pressure. As a result, they may follow their physician's instructions faithfully for a while. But as soon as they are feeling better, they stop taking the medication. In many cases, they also tend to miss appointments as long as they are feeling well.

Health care providers must play a major role in providing patient and consumer education to this community. Myths about hypertension must be dispelled, and in their place must be substituted positive, healthy attitudes about this major health problem.

PART 3

Appendices

# Appendix A

## CONFERENCE PLANNING COMMITTEE

Adelbert L. Campbell, M.P.H.  
Health Systems Management Corporation  
Oakland, California

Jose Carlos  
Los Angeles County  
Department of Health  
Los Angeles, California

Jose Duarte, M.P.A.  
East Los Angeles Health Task Force  
Los Angeles, California

Tomas Estrada  
Office of Lieutenant Governor  
Mervyn M. Dymally  
Los Angeles, California

Luis Fernandez, Ph.D.  
Mental Research Institute  
Palo Alto, California

Jane Luna, R.N.  
Los Angeles, California

Bernadette De Mendoza, M.P.H.  
La Clinica Familiar del Barrio  
Los Angeles, California

Gilbert Ojeda  
Chicano Health Institute for  
Students, Professors, and Alumni  
Berkeley, California

Eliezer Risco, M.P.H.  
United Health Centers of the  
San Joaquin Valley  
Orange Cove, California

Louis Rodríguez  
East Los Angeles Health Task Force  
Los Angeles, California

Richard J. Rodríguez  
State of California  
Department of Health  
Sacramento, California

Faustina Solís  
State of California  
Department of Health  
Sacramento, California

Antonio Spampinato, M.P.H.  
Berkeley City Health Department  
Berkeley, California

Cherlyn Spencer  
Charles Drew Medical-Dental Center  
Los Angeles, California

Alec Velasquez, M.P.H.  
State of California  
Department of Health  
Sacramento, California

William Wallenburg  
Family Health Foundation  
Alviso, California

# Appendix B

## PROGRAM PARTICIPANTS

Frances Acosta  
N.E. Valley Health Corporation  
12756 Van Nuys Boulevard  
Pacoima, California 91331

Gabriel Arce, M.P.H.  
Executive Director  
Centro De Salud De La Comunidad  
De San Ysidro, Inc.  
San Ysidro, California 92073

Rosina Becera, Ph.D.  
Associate Professor  
Institute for Social Science Research  
Bunche Hall  
University of California at Los Angeles  
Los Angeles, California 90024

Anthony M. Bruno, M.D.  
Associate Bureau Director  
Bureau of Community Health Services  
U.S. Public Health Service  
5600 Fishers Lane  
Rockville, Maryland 20857

Adelbert L. Campbell, M.P.H.  
Health Systems Management Corporation  
7700 Edgewater Drive  
Oakland, California 94621

Jose Carlos  
Special Assistant to the Director of  
Health Services  
County of Los Angeles  
Department of Health Services  
313 North Figueroa  
Los Angeles, California 90012

Roberto Carillo  
California State Assembly  
Office of Research, Room 111  
1116 9th Street  
Sacramento, California 95814

Ruy Castaneda, M.D.  
Health Officer, Tijuana, Baja California  
Co-President, California/Baja  
California Bi-National Health Council  
Centro De Salud Urbano Numero 1  
Tijuana, Baja California

Annie Collins  
National High Blood Pressure Education  
Program  
National Heart, Lung, and Blood  
Institute, NIH  
Building 31, Room 4A18  
Bethesda, Maryland 20205

Margo de la Vega, M.P.H.  
Kaiser Foundation Hospital  
470 Cragmont Avenue  
Berkeley, California 94708

Ron Dowd, Ph.D.  
Director of Research and Evaluation  
County of Los Angeles  
Department of Health Services  
313 North Figueroa  
Los Angeles, California 90012

Jose Duarte, M.P.A.  
East Los Angeles Health Task Force  
1518 South Garfield Avenue  
Los Angeles, California 90022

Tomas Estrada  
Office of Lieutenant Governor  
Mervyn M. Dymally  
Barclays Bank Building, Suite 502  
2975 Wilshire Boulevard  
Los Angeles, California 90005

Luis Fernandez, Ph.D.  
Deputy Director  
Mental Research Institute  
555 Middleheld Road  
Palo Alto, California 94301



Calvin Freeman, M.A.  
High Blood Pressure Program  
State of California  
Department of Health  
714 P Street, Room 499  
Sacramento, California 95814

Javier E. Garcia De Alba, M.D.  
Professor of Public Health  
School of Medicine  
University of Guadalajara  
Apartado Postal Numero 1 - 3838  
Guadalajara, MEXICO, D.F.

Luis Garcia, M.P.H.  
Executive Director  
N.E. Valley Health Corporation  
12756 Van Nuys Boulevard  
Pacoima, California 91331

Ramon Alvarez Gutierrez, M.D.  
Director of International Health  
for Mexico  
Apartado Postal 21 - 891  
MEXICO, D.F.

The Honorable  
Teresa P. Hughes  
Assemblywoman, 47th District  
3253 South Hoover Avenue, Suite A  
Los Angeles, California 90007

Ventura Huerta, M.P.H.  
California Rural Health Federation  
375 North Fulton  
Fresno, California 93701

Ernesto Iglesias, M.P.H.  
Office of Planning and Program Analysis  
State of California  
Department of Health  
714 P Street, Room 1492  
Sacramento, California 95814

Herlinda Jackson, R.N., P.H.N.  
County of Los Angeles  
Department of Health Services  
313 North Figueroa  
Los Angeles, California 90012

Manuel Jaques  
Community Center - Santa Clara  
River Valley  
201 South 10th Street, Suite C  
Santa Paula, California 93060

Alvin Leonard, M.D., M.P.H.  
Associate Chief  
Chronic Disease Control Section  
State of California  
Department of Health  
714 P Street, Room 499  
Sacramento, California 95814

Andrew Lewin, M.D.  
Director  
Medical Clinic, Inc.  
9201 Sunset Boulevard  
Los Angeles, California 90069

Juan López, M.P.H.  
Health Planning Associate  
Health Systems Agency of San Diego  
and Imperial Counties  
Suite 204  
2831 Camino Del Rio South  
San Diego, California 92108

Elicia Luck, M.P.H.  
East Los Angeles Health Service Center  
670 South Ferris Avenue  
Los Angeles, California 90022

Jane Luna, R.N., M.S.  
1275 South Woodruff Avenue  
Los Angeles, California 90024

Pamela Martindale, M.P.H.  
N.E. Valley Health Corporation  
12756 Van Nuys Boulevard  
Pacoima, California 91331

Jean Mathison  
Pico Rivera Health Center  
6336 South Passons Boulevard  
Pico Rivera, California 90660

Marilyn McClanahan, M.P.H.  
High Blood Pressure Council of  
Los Angeles  
2603 West Magnolia Boulevard  
Burbank, California 91505

Jose Montez  
Community Relations  
CBS-TV, Channel 2  
5121 Sunset Boulevard  
Los Angeles, California 90028

The Honorable  
Joseph Montoya  
Assemblyman, 60th District  
3617 Monterey Avenue  
El Monte, California 91731

Marco Montoya, Ph.D.  
Division of Extramural Research  
National Center for Health  
Services Research  
Room 841, Center Building  
3700 East West Highway  
Hyattsville, Maryland 20782

Carmen Morales  
Coordinator, OIMSP  
c/o East Los Angeles Health Task Force  
1518 South Garfield Avenue  
Los Angeles, California 90022

Ruth Muñoz, P.H.N.  
c/o East Los Angeles Health Task Force  
1518 South Garfield Avenue  
Los Angeles, California 90022

Mario Obledo  
Secretary, Health and Welfare Agency  
State of California  
915 Capitol Mall, Room 200  
Sacramento, California 95814

Ralph Ochoa  
Office of the Honorable  
Leo McCarthy  
California State Assembly  
1116 9th Street  
Sacramento, California 95814

Gilbert Ojeda  
Chicano Health Institute for Students,  
Professors, and Alumni  
University of California at Berkeley  
2134 McGee Avenue, Apartment D  
Berkeley, California 94703

Stan Padilla, M.D.  
Physician  
San Francisco General Hospital  
1001 Potrero Avenue  
San Francisco, California 94110

Alfredo Perez  
Pico Rivera Health Center  
6336 South Passons Boulevard  
Pico Rivera, California 90660

Amelie G. Ramirez, M.P.H.  
Baylor College of Medicine  
National Heart Center  
1200 Moursund, Room 176 B  
Houston, Texas 77025

Eliezer Risco, M.P.H.  
United Health Centers of the  
San Joaquin Valley  
445 11th Street  
Orange Cove, California 93646

Edward J. Roccella, Ph.D., M.P.H.  
National High Blood Pressure  
Education Program  
National Heart, Lung, and Blood  
Institute, NIH  
Building 31, Room 4A18  
Bethesda, Maryland 20205

Louis Rodríguez  
East Los Angeles Health Task Force  
1518 South Garfield Avenue  
Los Angeles, California 90022

Ramon Rodríguez, M.D.  
Clinic Physician  
Clinica Salubridad de Campesinos  
1166 K Street  
P. O. Box 1279  
Brawney, California 92227

Richard J. Rodríguez  
Health Program Advisor  
State of California  
Department of Health  
714 P Street, Room 499  
Sacramento, California 95814

The Honorable  
Edward R. Roybal  
Congressman, 25th District  
Federal Building, Room 7106  
300 North Los Angeles Street  
Los Angeles, California 90012

Ramon Salcido, Ph.D.  
Associate Professor  
School of Social Welfare  
University of Southern California  
Los Angeles, California 90007

Ms. Faustina Solís  
Deputy Director for Public Health  
Division  
State of California  
Department of Health  
714 P Street, Room 450  
Sacramento, California 95814

Juanita Soría  
East Los Angeles Health Advocate  
147 North Eastman Avenue  
Los Angeles, California 90022

Antonio Spampinato, M.P.H.  
c/o Community High Blood Pressure  
Control Program  
Berkeley City Health Department  
3284 Adeline Street  
Berkeley, California 94703

Peter Spenuza, Ph.D.  
Institute for Social Science Research  
Bunche Hall  
University of California at Los Angeles  
Los Angeles, California 90024

Charles Stewart  
Executive Vice President  
Blue Shield  
2 North Point Street, 3rd Floor  
San Francisco, California 94133

The Honorable  
Art Torres  
Assemblyman, 56th District  
State Capitol, Room 6001  
Sacramento, California 95814

Fernando Torres-Gil, Ph.D.  
Associate Professor  
School of Gerontology  
University of Southern California  
Los Angeles, California 90007

Walter Ulloa  
KMEX-TV, Channel 34  
5420 Melrose Avenue  
Los Angeles, California 90038

Dave Valencia, M.P.H.  
Associate Planner for the Office of  
Statewide Health Planning  
State of California  
Department of Health  
714 P Street, Room 977  
Sacramento, California 95814

Alec Velasquez, M.P.H.  
Special Assistant to the Assistant  
Director  
State of California  
Department of Health  
714 P Street, Room 1253  
Sacramento, California 95814

Barbara Yamasaki, P.H.N.  
N.E. Valley Health Corporation  
12756 Van Nuys Boulevard  
Pacoima, California 91331

Balt Yanez  
Administrative Assistant to the  
Honorable Edward R. Roybal  
Federal Building, Room 7106  
300 North Los Angeles Street  
Los Angeles, California 90021

**DISCRIMINATION PROHIBITED** – Title VI of the Civil Rights Act of 1964 states: "No person in the United States shall on the ground of race, color, sex, age, or national origin, be excluded from participation in, be denied the benefit of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Therefore, the National High Blood Pressure Education Program, like every program or activity receiving financial assistance from the Department of Health, Education, and Welfare, must be operated in compliance with this law.