

1986

An exploratory-descriptive study of the level of knowledge about diabetes among Mexican American men and women between the ages 35 and 60 in San Jose, CA

Sonya Nanette Silva
San Jose State University

Follow this and additional works at: https://scholarworks.sjsu.edu/etd_projects

Recommended Citation

Silva, Sonya Nanette, "An exploratory-descriptive study of the level of knowledge about diabetes among Mexican American men and women between the ages 35 and 60 in San Jose, CA" (1986). *Master's Projects*. 1155.

DOI: <https://doi.org/10.31979/etd.vkbr-q875>

https://scholarworks.sjsu.edu/etd_projects/1155

This Master's Project is brought to you for free and open access by the Master's Theses and Graduate Research at SJSU ScholarWorks. It has been accepted for inclusion in Master's Projects by an authorized administrator of SJSU ScholarWorks. For more information, please contact scholarworks@sjsu.edu.

3 0800 02597 1943



AN EXPLORATORY-DESCRIPTIVE STUDY OF THE
LEVEL OF KNOWLEDGE ABOUT DIABETES AMONG
MEXICAN AMERICAN MEN AND WOMEN BETWEEN
THE AGES 35 and 60, IN SAN JOSE, CA.

A Special Study
Submitted to the
School of Social Work
San Jose State University

In Partial Fulfillment
of the Requirements for the
Masters of Social Work Degree

by
Sonya Nanette Silva
August 1986

SAN JOSE STATE UNIVERSITY
SCHOOL OF SOCIAL WORK

APPROVED

EXAMINING BOARD:

Antonio R. Soto
Sonnie Ruiz Nelson
Margaret D. Diappa
DATE: *Sept 12* / 1986

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS.....	i
LIST OF TABLES.....	ii
CHAPTER	
1. THE PROBLEM AND ITS SETTING.....	1
Background of the Disease.....	2
Impact of the Problem.....	6
The Hypothesis.....	8
Definition of Terms.....	8
Need for the Study.....	9
2. REVIEW OF LITERATURE.....	11
3. METHODS AND PROCEDURES.....	15
Description of Hypothesis.....	15
The Population.....	15
Data Collection.....	16
Analysis of the Data.....	18
4. RESULTS.....	20
Demographic Profile.....	21
Table 1.....	24
Table 2.....	25
Table 3a.....	26
Table 3b.....	27
Table 4.....	28
Table 5a.....	29
Table 5b.....	30
Table 6a.....	31
Table 6b.....	32
Table 7a.....	33
Table 7b.....	34
Table 8a.....	35
Table 8b.....	36
Table 9a.....	36
Table 9b.....	37
Table 10.....	38
Table 11.....	39
Table 12.....	40
Table 13.....	41
Table 14.....	42

Table 15.....	43
Table 16.....	44
5. CONCLUSIONS AND RECOMMENDATIONS.....	45
Conclusions.....	45
Recommendations.....	50
APPENDIDIX	
A. Consent Form.....	52
B. Questionnaire.....	53
ENDNOTES.....	56
BIBLIOGRAPHY.....	61

Acknowledgments

I wish to acknowledge and thank my precious friend and fiancé` DelRay Baca, for his encouragement, support and enthusiasm for this study.

Special thanks and appreciation go to my committee members, Dr. Antonio Soto, Dr. Margaret Dieppa, and Lorraine Maloon, M.S.W., for their valuable knowledge and guidance in the approach and write-up of this study.

-S.N.S.

LIST OF TABLES

	Page
1. Responses to the question: "Have you ever been medically tested for diabetes?"	24
2. Responses to the question: "Have any of your close relatives ever been diagnosed as having diabetes?"	25
3. Responses to the question: "What is diabetes?"	26
4. Responses to the question: "Is diabetes curable?"	28
5. Responses to: "From your point of view, which of the following is a <u>cause</u> of diabetes?"	29
6. Responses to: "In your opinion, which of the following must be <u>well-controlled</u> by a diabetic person?"	31
7. Responses to: "In your opinion, which of the following symptoms indicate the possibility of diabetes?"	33
8. Responses to: "From what sources have you learned/heard about diabetes?"	35
9. Responses to the question: "If you thought you had diabetes, where would you go for a medical check-up?"	36
10. Responses to: "Do you have any of the following?"	38
11. Responses to: "How often do you use health services?"	39
12. Responses to: "If you were diagnosed as a diabetic, what would your initial feeling be?"	40
13. Responses to: "If you were diagnosed as a diabetic, <u>what would you do?</u> "	41
14. Responses to: "How would you rate your overall health?"	42
15. Responses to the question: "DO you think there is enough educational literature about diabetes for the Mexican American population in San Jose?"	43
16. Responses to the question: "Do you feel there is enough health related community services to meet the health needs of the Mexican American population in San Jose?"	44

CHAPTER 1

THE PROBLEM AND ITS SETTING

STATEMENT OF THE PROBLEM

Diabetes is the nations third major health problem...only cancer and heart disease cause more deaths.¹

Diabetes is a disease which affects people of all ages and of all cultures. However, studies indicate the highest incidence of diabetes occurs in people between the ages of 35 and 60.² Recent studies have also shown, that there is a statistical evidence of a higher risk of diabetes among Mexican Americans.³

Extensive research has been conducted and recorded on the metabolic abnormalities brought about by the disease of diabetes. However, it is unfortunate that research is limited in regard to the high prevalence of diabetes in Mexican-American populations. This researcher feels it is imperative to expand the state of knowledge in regard to this problem area, especially in consideration of the high proportion of Mexican Americans within our population, who are at high risk of being affected by the disease of diabetes.

Diabetes is a 365 day-a-year lifelong disease. It cannot be cured, although with proper management, diet, and exercise it can be controlled.⁴

-People with diabetes are 17 times more prone to kidney disease.

-50% of Type I diabetics develop kidney disease within an average of 20 years.

It is estimated that diabetes affects 10 million Americans.¹⁹ "In 1979, approximately 723,000 adult Californians (age 18 and older) were estimated to have diabetes, which is 4.6 percent of the adult population"²⁰ According to statistics from the Diabetis Society of Santa Clara Valley, there are over 50,000 diabetics in Santa Clara County.

The impact of diabetes among Mexican Americans in California is confirmed to be significantly greater in comparison to other population groups.

Mexican Americans comprise 19.2% of the total State population.²¹ In Santa Clara County alone, 17.5% of the population is Spanish surnamed.²² The vast majority (approximately 75%) of the Latinos are of Mexican heritage, and are often referred to as Mexican Americans or Chicanos.²³

As mentioned earlier, it is estimated that 90% of diabetics are between the ages of 35 and 60 when diagnosed as having Type II diabetes.²⁴ Therefore, this researcher finds it important to focus this study on male and female non-diabetic Mexican Americans, between the ages 35 and 60 in San Jose, California.

The total population in the city of San Jose is estimated to be 629,442.²⁵ Approximately 22,979 (14%) are Mexican American males and females between the ages of 35 and 60.²⁶

In reference to the population characteristics as stated above, a discerning fact is brought to light. "The high concentration of Mexican Americans in the population of San Jose are an at risk population for the disease of diabetes." It is for this reason that additional attention should be given toward further research on diabetes as it relates to Mexican Americans.

THE HYPOTHESIS

The Low Level Of Knowledge
Among Mexican Americans Regarding
Diabetes Is Related To The High
Rate Of The Disease Of Diabetes
In The Mexican American Population.

DEFINITION OF TERMS

Diabetes-

-diabetes, diagnostically termed "diabetes mellitus" is a disease associated with deficient insulin secretion, leading to excess sugar in the blood and urine. There are two types of diabetes, juvenile onset, and adult onset.

Mexican American

-persons born in Mexico, but who now reside in the United States, also those persons born in the United States, but who are of Mexican descent. The term Mexican American may be used interchangeable with Latino, Hispanic, Chicano.

Level of Knowledge

-the awareness, insight, and factual knowledge a person has in relation to diabetes.

Primary Prevention

-the measures undertaken to obviate the development of disease in susceptible populations. It consists of health promotion, which includes organizations and institutions that enhance the general well-being of the population.

NEED FOR THE STUDY

The findings of this study will be beneficial not only to service providers in public health and social welfare, but most importantly to the population under study.

This study will contribute to the research of Mexican Americans and diabetes, specifically in relation to the level of knowledge Mexican Americans have about diabetes.

This researcher hopes that the results of this project will increase the awareness of social workers, public health, and other health professionals to see the significance of needed preventive medicine programs- programs which emphasize bilingual/bicultural health services. This approach could lead to efforts at easing the high risk of diabetes among Mexican American populations.

CHAPTER 2

REVIEW OF LITERATURE

In the early part of the 1920's, when research discovered the basic reason for the disease of diabetes, the majority of studies since then, have focused primarily on the metabolic abnormalities brought about by the disease as well as on the treatment and management of the disease.

Studies conducted in the late 1970's began to recognize the disease of diabetes as being more common among women, black people, the less educated, and those with low family income.²⁷

It was not until the early 1980's that published information began to shed light on the high prevalence of diabetes in Mexican Americans. Of the first known studies, Drs. Robert Ferrell and Michael Stern in their research were able to show the first statistical evidence of a higher risk of diabetes among people of Mexican descent. From their population sample of Mexican Americans in far south Texas, the two researchers concluded that:

-People that are of Mexican descent, are five times as likely to contract adult onset diabetes compared to Anglos. Another conclusion by these researchers is that there is a possible genetic basis, traceable to Indian ancestry, which is suspected for the high prevalence of the disease among this population.²⁸

Dr. Peter Bennett an epidemiologist, conducted several studies during the early 1970's which revealed that the Pima Indians get diabetes 20 times as frequently as Anglos.²⁹ According to Dr. Peter Bennett, many minority groups such as American Indians, or Mexican Americans who being "under the influence of increased acculturation and with the adoption of western foods, reduced levels of physical activity, and increasing degrees of obesity have higher prevalence rates of non-insulin dependent diabetes mellitus than found in Caucasians."³⁰

A study conducted by researchers from the Department of Clinical Epidemiology, University of Texas specifies that obesity is the most well established risk factor for non-insulin dependent diabetes. The study also mentioned that it should be recognized that other, as yet unidentified factors associated with low-socioeconomic status could also contribute to the high rate of diabetes in Mexican American populations.³¹

There is increasing data which reveal that the health of Hispanics is usually poorer than the health of other population groups.

In a report to the "1st Annual Forum on the Status of Hispanic Health," Carlos Valbona brought out the point that "risk factors that are associated to socio-economic conditions under which most low income, urban Hispanics live include inadequate sanitation, inappropriate nutritional habits, physical stress during work, and mental stresses."³²

According to literature on diabetes, it is generally considered that diabetes is an inherited condition, due to a metabolic defect, however there is increasing data which support the fact that diabetes can be precipitated by emotional stress.³³

Emotional stress is a factor many people experience, especially when considering that certain variables associated with stress are more prevalent in Hispanic populations than in other populations. High stress variables that are prevalent in Hispanic populations are poverty, lower paying jobs, underemployment, unemployment, less education, lower life expectancy, higher dependency ratio, and bilingual/bicultural barriers with social systems.³⁴

A point made by Simon Dominguez, ACSW, and Hector B. Garcia Ph.D, in their study of "Health Resources For Unemployed Latinos in the United States," is that early detection and treatment diabetes could prevent the number of deaths by making medical knowledge readily available to the Spanish speaking populations.³⁵

In the review of literature, it was found by this researcher that very little attention has been given to the disease of diabetes. Dr. Robert Ferrel, one of the primary researchers of diabetes among Mexican Americans, made reference towards the importance of further study in relation to the level of knowledge Mexican Americans have about diabetes. In an interview with the Los Angeles Times, Dr. Ferrell made the

statement that, "Somebody has to take responsibility to make them (Mexican Americans) aware that they are at high risk, and to formulate a program to deal with the lack of knowledge of the disease in that population."³⁶

This researcher is in agreement with Dr. Ferrell, in that the high prevalence to the disease of diabetes among Mexican-Americans is partly due to their "lack of knowledge" to the disease.

A very informative and recent study conducted by Sally A. Salinas, a graduate from the School of Social Work, San Jose State University, examined the issues of perceptions held among Spanish-speaking elderly in relation to the epidemiology and management of diabetes. The study addressed itself to "the little discussed problem of identification of cultural, perceptual and socio-economic barriers which impact the planning for and efficacy of services delivery, preventive and diabetic management education and programs targeted among Spanish-speaking elderly."³⁷ The findings of this study revealed that the population sample of Spanish-speaking elderly lack emotional, educational, and economic support systems which in turn have a negative effect on the management and control of the disease.³⁸

This researcher concludes from the literature reviewed, that diabetes among Mexican Americans can be precipitated by various factors. A possible factor for consideration of this study is the lack of education/lack of knowledge toward diabetes among this high risk population.

CHAPTER 3

METHODS AND PROCEDURES

DESCRIPTION OF HYPOTHESIS

Following is the hypothesis addressed in this study:

The low level of knowledge among Mexican Americans regarding diabetes, is related to the high rate of the disease of diabetes in the Mexican American population.

THE POPULATION

The subjects of this study were non-diabetic Mexican-American individuals between 35 and 60 years of age. Upon actual distribution of the survey, the researcher relied on the subjects self-knowledge of whether they were diabetic or non-diabetic. The subjects who were interviewed were those who stated that they were non-diabetic Mexican-Americans between the ages of 35 and 60.

At the onset of the survey, the goal of this researcher was to attain a population size of fifty (50) respondents. Consideration was given to the possibility of excluding a certain number of potential respondents on account of their inappropriateness of age, ethnicity, or medical diagnosis of being diabetic.

The survey area which the researcher chose was within the East San Jose area, the census tract of 5037.02. According to population characteristics of the 1980 Census, the census tract of 5037.02 is designated to have an approximated 82.6% Hispanic population.³⁹ The high percentage of Hispanics within this area is what prompted the researcher to survey within the boundaries of this particular census tract.

The researcher selected several streets within the census tract of 5037.02 to conduct the survey. The streets chosen were Alum Rock, Jackson Ave., Plaza de Guadalupe, Calle de Guadalupe, San Antonio, King Road, and McCreery.⁴⁰ Within these streets, the researcher chose addresses in hope that the resident(s) would fit the criteria for the study, and furthermore be inclined to participate in the interview process.

DATA COLLECTION

The data collection process was performed by personal interviews. A semi-structured questionnaire was administered, consisting of closed and fixed-alternative questions which provided categories of responses from which the respondents chose. Also, the questionnaire consisted of open-ended questions, which allowed the respondents to answer in whatever way they chose.

Prior to the interview, the researcher introduced herself, and offered an introductory explanation of the study.

All of the respondents in the study consented to their participation by signing the "Subject Consent Form." Preparations were made by the researcher to be able to distribute the survey both in English and Spanish.

Upon completion of the interview, the researcher proceeded on with debriefing remarks regarding the study. The researcher then expressed appreciation to the respondents for their cooperation.

The survey was conducted between the time period of June 3, 1986 to June 10, 1986. A total of thirty-two interviews were completed. An interesting fact to acknowledge is that out of the sixty (60) homes approached, six (6) of the potential respondents were diabetic, and according to criteria set by the researcher were thus unable to participate. The remaining twenty-two (22) individuals did not partake in the study because they were either inappropriately aged or of another ethnic background other than Mexican American. A very small number of individuals approached took the right to personally refuse participation in the study.

A limitation of this study is that it is a small sample size; it is not a representative sample and was not a randomly drawn sample.

ANALYSIS OF THE DATA

For the purpose of this study, an "exploratory-descriptive design" will be used.

According to Sellitz et.al., an exploratory-descriptive study is defined as a study whose purpose is:

- to gain familiarity with a phenomenon or to achieve new insights into it, often in order to formulate a more precise research problem or develop hypothesis;

- to portray accurately the characteristics of a particular individual, situation, or group (with or without specific initial hypothesis about the nature of these characteristics);

- to determine the frequency with which something occurs, or with which it is associated with something else (usually, but not always, with a specific initial hypothesis);

- to test the hypothesis of a causal relationship between variables.⁴¹

This study fits the conditions of an exploratory-descriptive study as defined by Sellitz et. al., in that the main goal of this study is to describe the level of knowledge Mexican Americans have about diabetes. Acquiring information from the designated population, this researcher will describe responses obtained in an effort to develop needed information about Mexican Americans and their knowledge of the disease of diabetes.

In view of the fact that there is limited research in the area of diabetes and the Mexican American, this researcher hopes to stimulate more concepts and ideas toward this problem area, and contribute to laying the groundwork for more definitive studies.

To evaluate the data, a distribution chart will be developed for each of the twenty-four questions. Frequency distributions will be calculated and then converted into percentages.

This researcher believes it is of significance to conduct such a study, since it is a study which takes a preventative approach to disease prevention among a population who are at risk of developing the disease of diabetes.

CHAPTER 4

RESULTS

The subject under study is an exploratory and descriptive analysis of the level of knowledge about diabetes among Mexican American men and women between the ages of 35 and 60, in San Jose, California.

Following are tables which relate to the demographic profile of the sample population, and to their responses toward questions related to the subject under study.

In reference to the data on the following tables, this researcher finds it important to provide clarification of the base number used in the calculated percentages for six out of the twenty-four questions.

If the respondent stated they were unable to answer question eleven on the questionnaire "What is diabetes?" they were directed to proceed to question eighteen. The reasoning behind this is that questions twelve thru seventeen dealt directly with further knowledge toward diabetes. This researcher constructed the questionnaire in such a manner as to avoid the probability of having the respondent "guess at" questions twelve thru seventeen since they were unable to answer the initial question related to diabetes.

Seven (7) out of the thirty-two (32) respondents were unable to answer question eleven. Therefore, the base number for questions eleven thru seventeen for respondents which were able to answer question eleven, is twenty-five (25). The base number for the remaining questions is thirty-two (32); which includes the seven respondents unable to answer question eleven, ie. "What is diabetes?." Thus, the results of this study are computed differently depending on the base number used.

Demographic Profile

Following are characteristics of the population sample as it pertains to this study:

-The sample population consisted of a total of thirty-two respondents, fourteen males, and eighteen females.

-The average age for the respondents in this sample population was forty (40) years of age.

-The majority of the respondents were married, and lived within a household composed of an average of four to five persons.

-The self-perceived income level was as follows:

	(M & F)	MALES	FEMALES
LOW INCOME	17	6	12
MIDDLE INCOME	13	7	5
HIGH INCOME	2	1	1
TOTAL	32		

As the data indicates, the majority of respondents (53%) perceived their income level as "low income."

The response given toward educational attainment of the sample was as follows:

	(M & F)	MALES	FEMALES
NONE	1	1	0
1-8	6	2	4
8-12	18	7	11
Some College	4	2	2
College Grad.	2	2	0
Other	1	0	1
TOTAL	32		

As the data indicates, the majority of respondents (57%) had 8 to 12 years of education. The respondent who answered the "other" category, specified they had attended a Trade School.

The response given regarding language capability
was as follows:

	(M & F)	MALES	FEMALES
ENGLISH ONLY	7	3	4
SPANISH ONLY	8	4	4
BILINGUAL	17	7	10
TOTAL	32		

As the data indicates, the majority of respondents (53%) have bilingual capabilities in both English and Spanish.

TABLE 1

Responses to the question: "Have you ever been medically tested for diabetes?"

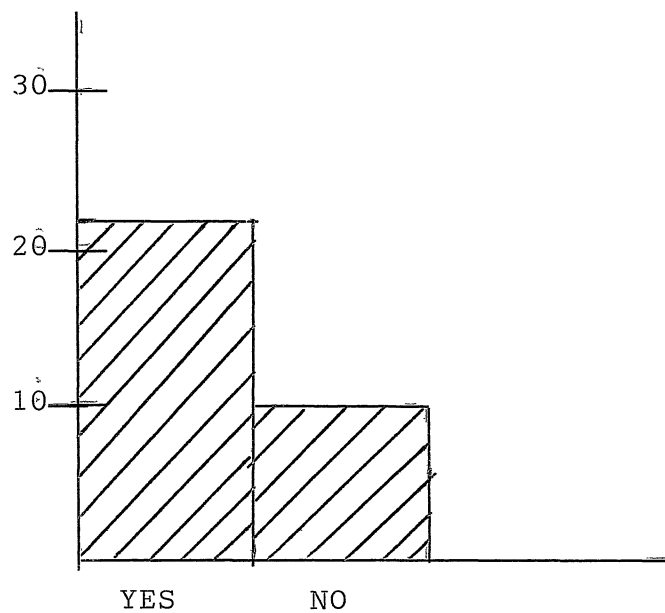
	YES	NO	TOTAL
MALE & FEMALE RESPONSES	17	15	32

Approximately 53% of the respondents stated that they have been medically tested for diabetes. During the interview process, this researcher received many comments from respondents answering "yes" that they "believed" a diabetes test was completed during a routine medical check-up. Approximately 47% stated that they have not been medically tested for diabetes.

TABLE 2

Responses to the question: "Have any of your close relatives ever been diagnosed as having diabetes?"

Male & Female
Responses



Approximately 69% of the respondents have close relatives who have been medically diagnosed as having diabetes. Thirty-one (31%) percent of the respondents stated that no close relatives have been medically diagnosed as having diabetes.

TABLE 3a~

Responses to the question: "What is diabetes?"

The general responses were as follows:

Nine respondents answered:

"sugar in the blood"

*Seven respondents answered:

"I don't know"

Six respondents answered:

"eating too much"

Two respondents answered:

"not enough sugar in the body"

Two respondents answered:

"a disease in the blood"

Two respondents answered:

"a disease caused by the lack of
of the hormone insulin"

Two respondents answered:

"sugar in the veins"

Two respondents answered:

"a disease related to sugar"

According to the general responses given by the respondents, approximately 65% of the respondents believed that diabetes was related to sugar in the body. Sugar was stated as being related to diabetes whether it was in

TABLE 3b

the blood, in the veins, or whether a person was consuming too much of sugar that the body contained an excess of sugar, or that not enough was being consumed where the body had insufficient amounts.

Seven (22%) out of thirty-two (32) respondents did not know what diabetes was, therefore were directed to skip questions twelve thru seventeen, and proceed to question eighteen on the questionnaire.

Only six percent of the respondents stated that diabetes was a disease caused by a lack of the hormone insulin in the body.

TABLE 4

Responses to the question: "Is diabetes curable?"

	YES	NO	NOT SURE	TOTAL
MALE & FEMALE RESPONSES	8	13	4	25

The data indicates, 52% of the respondents believed that diabetes was not curable. Thirty-two percent of the respondents believed that diabetes is curable, and 16% of the respondents were not sure whether diabetes is curable or not.

TABLE 5a

Responses to: "From your point of view, which of the following
is a cause of diabetes?"

*runs in the family	*high stress	too much radiation	it's God's Will	*lack of the hormone insulin	it's conta- gious
15'	5	6	11	7'	1
due to old age	polluted water we drink	due to dirt and filth	*being overweight	*low fiber diet	*excess sugar in the blood and urine
14	8	3	12	5,	22,

*The asterisk indicates the medically established causes of diabetes
according to the American Diabetes Association.⁴²

TABLE 5b

This question was devised to provide six medically established causes of diabetes, and six "false" categories of responses. The respondents were allowed to answer as many categories of responses as they felt were applicable to the question.

As the asterisk indicates, the respondents scored excess sugar in the blood and urine (88%), runs in the family (60%), being overweight (48%), lack of the hormone insulin (28%), low fiber diet (20%), and high stress (20%), as causes related to diabetes. The respondents scored the false categories to causes of diabetes as due to old age (56%), it's God's Will (44%), polluted water we drink (32%), too much radiation (24%), due to dirt and filth (12%), it's contagious (4%).

TABLE 6a

Responses to: Which of the following must be well-controlled
by a diabetic person?"

*	*	*	*		*
sleep	medica- tions	skin condition	coffee or tea	physical activity	high calorie foods
11	18	4	10	12	11
*					
diet	foods high	vitamin intake	exposure to sun	intake of beverages	Other
14	12	5	6	18	0

*The asterisk indicates the medically established factors that
a diabetic person has to keep under control.⁴³

TABLE 6b

This question was devised to provide a number of medically known that a diabetic person has to keep well under control, as well as false categories of factors of what has to be well controlled by diabetic person.

The respondents were allowed to answer as many categories of responses as they felt were applicable to the question.

As the asterisk indicates the respondents scored medications (72%), diet (56%), physical activity (48%), high calorie foods (44%), sleep (44%), and skin condition (16%), as factors which must be well-controlled be a diabetic person. The respondents scored the "false" categories to controlling a diabetic condition as intake of beverages (72%), foods high in salt (48%), coffee or tea (40%), exposure to sun (24%), vitamin intake (20%).

TABLE 7a

Responses to: "In your opinion, which of the following symptoms indicate the possibility of diabetes?"

insomnia/ sleeplessness	*frequent urination	*problems with vision	*weakness/ fatigue	*exces- sive thirst
9	8	11	13	6
nervousness	*itchy dry skin	difficulty swallowing	stomach aches	Other
10	7	4	14	0

*The asterisk indicates the medically established "symptoms" of diabetes according to the American Diabetes Association.⁴⁴

TABLE 7b

This question was devised to provide medically established symptoms of diabetes, as well as "false" categories related to symptoms of diabetes.

The respondents were allowed to answer as many categories of responses as they felt were applicable to the question.

As indicated by the asterisk, the respondents scored weakness/fatigue (52%), problems with vision (44%), frequent urination (32%), itchy dry skin (28%), and excessive thirst (24%), as symptoms of diabetes. The respondents scored the "false" categories to symptoms of diabetes as: stomach aches (56%), nervousness (40%), insomnia/ sleeplessness (36%), difficulty swallowing (16%).

TABLE 8a

Responses to: "From what sources have you learned, or
heard about diabetes?"

television	newspaper	radio	magazine	educational brochure
8	3	4	3	6
diabetic family member	family/ friend	health care profes- sional	Other	None
13	15	6	2	0

-The respondents were allowed to answer as many
categories of responses as they felt were applicable to the
question.

TABLE 8b

Sixty-percent of the respondents have learned/heard about diabetes from a family/friend, 52% from a diabetic family member, 32% from television, 24% from a health care professional, 24% from educational brochures, 16% from the radio, 12% from the newspaper, 12% from a magazine, 8% responded "school" and a "Diabetic Society Workshop."

TABLE 9a

Responses to the question: "If you thought you had diabetes, where would you go for a medical check-up?"

The general responses were as follows:

Twenty respondents answered:
physician/doctor

Two respondents answered:
diabetes specialist

Two respondents answered:
Local Hospital

One respondent answered:
Jesus, I would leave it to
the Lord.

TABLE 9b

Eighty-percent (80%) of the respondents would go to a physician/doctor for a medical check-up if they thought they might have diabetes. Eight-percent (8%), said they would go to a diabetes specialist, another eight-percent (8%), said they would go to a local hospital, and four-percent (4%), said they would leave it to the Lord.

TABLE 10

Responses to: "Do you have any of the following?"

Medicare	Veterans Adm.	Medi-Cal	Blue Cross Blue Shield	None	Other
0	1	3	3	10	15

Forty-seven percent of the respondents answered "Other" while mentioning in the interview their private insurance. Thirty-one percent of the respondents do not have any type of insurance, 9% have Blue Cross/Blue Shield, 9% have Medi-Cal, and 3% have Veterans Adm.

TABLE 11

Responses to: "How often do you use health services?"

2-3-times a year	once a year	less than once a year	only when sick or in pain
6	5	3	18

Fifty-six percent of the respondents stated they use health services only when sick or in pain, 19% stated 2-3 times a year, 16% stated once a year, and 9% stated less than once a year.

TABLE 12

Responses to: "If you were diagnosed as a diabetic, what would your initial feeling be?"

The following words and phrases describe what the respondents answered:

Six respondents answered: worried

Five respondents answered: sad

Two respondents answered: I don't know

Three respondents answered: disbelief

Six respondents answered: afraid

Four respondents answered: shocked

One respondent answered: mad

One respondent answered: concerned

One respondent answered: depressed

One respondent answered: nervous

One respondent answered: disappointed

One respondent answered: wouldn't be too surprised

The most common answers given by the majority of the respondents were: worried, sad, shocked, and afraid.

TABLE 13

Responses to: "If you were diagnosed as a diabetic,
what would you do?"

Get a second opinion right away	Wait and see if it goes away	Learn as much as I could about diabetes	Stop eating foods that contain sugar	Follow Doctors advice on self-care	Pray a lot	Other
22	1	22	21	28	22	1

Eighty-eight percent (88%), of the respondents stated they would follow Doctors advice on self care if they were diagnosed as a diabetic. Sixty-nine percent (69%) stated they would pray a lot, 69% stated they would get a second opinion right away, another 69% stated they would learn as much as they could about diabetes, 66% stated they would stop eating foods that contain sugar, one person said they would wait and see if it goes away, and another person stated they would see a specialist of diabetes.

*Note: The respondents were allowed to respond to as many categories as they felt applied.

TABLE 14

Responses to: "How would you rate your overall health?"

Poor	Good	Very Good	Excellent
2	20	5	5

Sixty-three percent (63%) of the respondents stated they had "good" overall health, 16% stated "excellent," 16% stated "very good" and 6% stated "poor."

TABLE 15

Responses to the question: "Do you think there is enough educational literature about diabetes for the Mexican-American population in San Jose?"

YES	NO	NOT SURE
3	19	10

Fifty-nine percent (59%) of the respondents do not think there is enough educational literature about diabetes for the Mexican American population in San Jose, 31% are not sure, and 9% think there is enough.

TABLE 16

Responses to the question: "Do you feel there is enough health related community services to meet the health needs of the Mexican American population in San Jose?"

YES	NO	NOT SURE
9	17	6

Fifty-three percent (53%) of the respondents do not feel there is enough health related community services to meet the health needs of the Mexican American population in San Jose, 28% feel there is enough, and 19% are not sure.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

In conclusion, the basic premise of this study was an exploration of the level of knowledge Mexican Americans have about diabetes.

The study included a sample population of thirty-two Mexican Americans between the ages of 35 and 60 in San Jose, California. The majority of the sample population perceived themselves as being of low income status. The majority of the respondents also stated they had between eight to twelve years of education, and have bilingual capabilities in both English and Spanish.

From conducting the study, it was disclosed that the majority of respondents have a member in their family who is diabetic, most generally being a parent, grandparent, or sibling. The majority of respondents in this study were knowledgeable that diabetes is known to "run in the family." However, only half of the respondents have ever been medically tested for the disease of diabetes.

The study revealed that a good percentage of respondents did not have any knowledge of what diabetes is. Those respondents unable to answer the open-ended question, "What is diabetes?" were excluded from answering the remaining

questions which dealt with the respondents knowledge of diabetes. They were then asked to proceed to perceptual questions dealing with self perceived health status, and utilization of health services.

The general responses from the remaining number of respondents toward the initial question of "What is diabetes?" answered by relating it to sugar. Whether a person had too much or too little, due to overconsumption or underconsumption. Only two out of the thirty-two respondents had the more accurate description in relation to the etiology of the disease.

A little over half of the respondents knew that diabetes is not a curable disease, the remaining number were not sure, or did believe that the disease is curable.

The findings suggest that the respondents in this study have an adequate level of knowledge related to what is medically known to be common causes or precipitating factors of diabetes. A high percentage of respondents believed that diabetes is caused by factors such as heredity, excess weight, or excess sugar in the blood and urine. However on the other hand, almost equally, a high percentage of respondents held misconceptions that diabetes was caused by old age, God's Will, or polluted water which is consumed.

The researcher did not elaborate on religious orientation and belief in reference to the high percentage of responses among the respondents, that diabetes is caused by "God's Will." Therefore, it cannot be assumed in this study that the re-

respondents solely believe that diabetes occurs because it is the Will of God.

The findings also suggest that there is an adequate level of knowledge among the respondents toward medications, diet, and physical activity in the control of diabetes.

It was disclosed that respondents had limited knowledge about the symptoms of diabetes. They responded fairly toward two of the possible five medically established categories of symptoms of diabetes, which were weakness/fatigue, and problems with vision. A high percentage of respondents believed that the symptoms of diabetes were stomach aches, nervousness, or insomnia.

According to the findings, the large majority of respondents had learned or heard about diabetes from family, friends, or a person in their family who is diabetic. A fair to poor percentage of respondents had learned or heard about diabetes from their health care professional, television, educational brochures, radio, newspaper or magazine. A very small percentage had learned or heard about diabetes from school or community education such as diabetes workshops.

The findings stated that the vast majority of respondents would go to a physician or doctor for a medical check-up if they thought they had diabetes. The findings also reveal that the most common response felt by the respondent if they were diagnosed as diabetic, would be worried, sad, shocked, and afraid. Additionally, according to the findings, the

majority of respondents would follow their doctors advice on self-care if they were diagnosed as diabetic. A very high percentage stated they would pray a lot, learn as much as they could about diabetes, while at the same time get a second opinion of the diagnosis. Over half of the respondents stated they would also stop eating foods that contain sugar.

The results also disclosed that nearly half of the respondents had some form of insurance, whereas a very high percentage did not have any type of medical coverage.

According to the results obtained, over half of the respondents perceived their overall health as being in "good" condition. Equally, over half of the respondents stated that they use health services only when their sick or in pain.

The findings further disclosed that the majority of respondents do not believe or are not sure that there is enough educational literature about diabetes for the Mexican-American population in San Jose. Again, the findings revealed that the majority of respondents do not feel or are not sure whether there are enough health related community services to meet the health needs of the Mexican American population in San Jose, California.

In summary, the researcher's main purpose was to explore and describe the level of knowledge of a sample of population of Mexican Americans regarding diabetes.

At the onset of this study, the researcher made the hypothesis that Mexican Americans had a low level of knowledge in regard to the disease of diabetes.

As a result from the findings of this study, this researcher concludes that the findings support the held hypothesis that Mexican Americans have a low level of knowledge about diabetes. Furthermore, this researcher concludes even though there may be adequate knowledge among the respondents toward the symptoms, causes, and the control of the disease, there is also misconceptions about the disease. This researcher speculates that much of the misconceptions held by the sample population of Mexican Americans is due impart to false or inaccurate information obtained from friends, family members, or family members who are diabetic.

This study seems to suggest that the high risk population of Mexican Americans are in need of preventive health education in respect to the epidemiology and management of diabetes.

This researcher concludes that the preceding conclusions lack external validity because of the small sample size used in this study. Therefore, the conclusions drawn in the study cannot be considered generalizations for the total Mexican American population. However, the findings of this study may be considered suggestive of the level of knowledge Mexican Americans have regarding diabetes.

RECOMMENDATIONS

As a result from the findings of this study, the researcher suggests the following recommendations:

1. Bilingual diabetes educational programs to be established in order to inform the at-risk population of Mexican Americans.

2. Bilingual/Bicultural paraprofessional health workers be trained to promote preventive health practices in low-income Mexican American neighborhoods.

3. That the State department of Health Services advocate for an increase in federal assistance to high risk populations for diabetes control efforts.

4. That neighborhood outreach programs be established as an extension of larger community clinics to ensure preventive education and preventive health care.

5. Free or low cost diabetes testing in clinics that are located in highly populated Mexican American neighborhoods.

6. Bilingual educational literature about diabetes and it's effect on the high risk population of Mexican Americans.

7. Further research on diabetes and as it relates to a larger sample population of Mexican Americans. Further research that will explore significant variables of income, education and stress related factors.

This researcher hopes that this study will provide a reference to students conducting research of a similar focus. This researcher also hopes that the findings of this study will increase the awareness of social workers, public health, and other health professionals to work at establishing needed diabetes educational programs. Programs which are preventive and which emphasize bilingual/bicultural health services.

APPENDIX

CONSENT FORM

You are invited to participate in a study on The Level of Knowledge About Diabetes Among Non-Diabetic Mexican-Americans Between The Ages of 35 and 60. The objective of this study is to describe the level of knowledge Mexican Americans have about diabetes.

You are requested to participate in this study because you are of Mexican American origin, and because you fall into the age category of which the researcher has selected to study.

Any information that is obtained in connection with this study and that can be identifies with you will remain confidential.

If you decide to participate, you are free to withdraw your consent and discontinue your participation at any time without prejudice.

If you have any questions feel free to address them to the researcher. If you have any additional questions later, please write to the researcher, and your questions will be gladly responded to.

Address your inquiries to: Sonya Nanette Silva
 4074 Hill Street
 Huntington Park, CA. 90255

-You will be given a copy of this form to keep.

-You are making a decision whether or not to participate. Your signature indicates that you have decided to participate having read the information provided above.

Signature of Participant

Signature of Researcher

QUESTIONNAIRE

Please Note: This questionnaire is to be filled out only by Mexican Americans between the ages of 35 and 60, who are "non-diabetic" persons.

Demographic Data

1. Census Tract _____ 2. Interview # _____
3. AGE _____ years 4. SEX: MALE _____ FEMALE _____
5. Marital Status: Married _____ Single _____ Widowed _____
Divorced _____ Separated _____ Other _____
6. What is your economic status?
Low Income _____ Middle Income _____ High Income _____
- 6a. How many persons in your household? _____
7. Education: None _____ 1-8 _____ 8-12 _____
Some College _____ College Graduate _____
Other _____ (please specify)
8. Language Capability: English speaking _____
Spanish speaking _____
Bi-lingual _____

9. Have you ever been medically tested for diabetes? YES _____ NO _____
10. Have any of your close relatives ever been diagnosed as having diabetes? YES _____ NO _____
11. What is diabetes?

11a If you are unable to respond to question #11, please skip the following questions, and proceed to #18 on this questionnaire.

12. Is diabetes curable? YES _____ NO _____ NOT SURE _____

13. From your point of view, which of the following is a CAUSE of diabetes? (mark all those that you feel apply)

- | | | |
|-----------------------------------|-------------------------------|---------------------------------------|
| _____ runs in the family | _____ it's contagious | _____ being overweight |
| _____ high stress | _____ due to old age | _____ low fiber diet |
| _____ too much radiation | _____ polluted water we drink | _____ excess sugar in blood and urine |
| _____ it's God's Will | _____ due to dirt and filth | |
| _____ lack of the hormone insulin | | |
| _____ Other (specify) | | |

*PLEASE GO ON TO NEXT PAGE

14. Which of the following must be WELL-CONTROLLED by a diabetic person? (mark all those that you feel apply)

- | | |
|---|--|
| <input type="checkbox"/> sleep | <input type="checkbox"/> diet |
| <input type="checkbox"/> medications | <input type="checkbox"/> foods high in salt |
| <input type="checkbox"/> skin condition | <input type="checkbox"/> vitamin intake |
| <input type="checkbox"/> coffee or tea | <input type="checkbox"/> exposure to sun |
| <input type="checkbox"/> physical activity | <input type="checkbox"/> intake of beverages |
| <input type="checkbox"/> high calorie foods | <input type="checkbox"/> Other(specify) |

15. In your opinion, which of the following SYMPTOMS indicate the possibility of diabetes? (check as many you believe apply)

- | | |
|---|--|
| <input type="checkbox"/> Insomnia/sleeplessness | <input type="checkbox"/> excessive thirst |
| <input type="checkbox"/> stomach aches | <input type="checkbox"/> nervousness |
| <input type="checkbox"/> frequent urination | <input type="checkbox"/> itchy/dry skin |
| <input type="checkbox"/> problems with vision | <input type="checkbox"/> difficulty swallowing |
| <input type="checkbox"/> weakness/fatigue | <input type="checkbox"/> Other(specify) |

16. From what SOURCES have you learned/heard about diabetes?

- | | |
|-------------------------------------|---|
| <input type="checkbox"/> television | <input type="checkbox"/> educational brochure |
| <input type="checkbox"/> newspaper | <input type="checkbox"/> diabetic family member |
| <input type="checkbox"/> radio | <input type="checkbox"/> family/friend |
| <input type="checkbox"/> magazine | <input type="checkbox"/> health care professional
(ie. doctor) |
| <input type="checkbox"/> None | <input type="checkbox"/> Other (specify) |

17. If you thought you had diabetes, where would you go for a medical check-up? _____

18. Do you have any of the following?

- | | | |
|--|--|---|
| <input type="checkbox"/> Medicare | <input type="checkbox"/> Medical | <input type="checkbox"/> Blue Cross/Blue Shield |
| <input type="checkbox"/> Veteran Adm. Services | <input type="checkbox"/> Other (specify) | |

19. How often do you use health services?

- | | |
|---|--|
| <input type="checkbox"/> 2-3 times a year | <input type="checkbox"/> Less than once a year |
| <input type="checkbox"/> Once a year | <input type="checkbox"/> Only when sick or in pain |

*PLEASE GO ON TO NEXT PAGE

20. If you were diagnosed as a diabetic, what would your initial feeling be?

21. If you were diagnosed as a diabetic, what would you do?
(check as many as you feel apply)

☐ Get a second opinion right away

☐ Wait and see if it goes away

☐ Learn as much as I could about diabetes

☐ Stop eating foods that contain sugar

☐ Follow my doctor's advice on how to care for myself

☐ Pray a lot

☐ _____ Other (specify)

22. How would you rate your overall health?

☐ Poor

☐ Good

☐ Very Good

☐ Excellent

23. Do you think there is enough educational literature about diabetes for the Mexican American population in San Jose?

☐ YES ☐ NO

24. Do you feel there is enough health related community services to meet the health needs of the Mexican American population in San Jose?

☐ YES ☐ NO

THANK YOU VERY MUCH FOR YOUR TIME AND EFFORT!

ENDNOTES

¹Diabetes Society of Santa Clara Valley, "To Promote Your Good Health," The 365 Quiz, [California] 1984, N.d; N.pag.

²Statistics of 1984, received from Margaret Anderson, Diabetes Society of Santa Clara Valley., 15 March, 1984. p.1.

³Louis Sahagan, "Higher Diabetes Risk Revealed Among Chicanos and Indians." (From a report by Drs. Robert Ferrel and Michael Stern) San Jose Mercury News from the Los Angeles Times, April, 1983. N.d.; N. pag.

⁴Diabetes Society of Santa Clara Valley, "To Promote Your Good Health," The 365 Quiz, [California] 1984, N.d; N. pag.

⁵Abe Brown, "Diabetes: Good News on the Horizon," Current Health, Vol. 12, No. 3, Nov. 1985, p.3.

⁶Encyclopaedia Britannica, 13th ed., s.v. "Diabetes Mellitus."

⁷Eli Lilly and Company, "A Guide For The Diabetic," [Indiana] Feb. 1980, N.d; p. 5.

⁸Kimberly Staggs, "Diabetes: A Basic Primer," The Coordinator, Vol. 3, No. 5, June 1984, p. 19.

⁹Ibid., p. 20.

¹⁰Diabetes Society of Santa Clara Valley, "To Promote Your Good Health," The 365 Quiz, [California] 1984, N.d; N. pag.

¹¹By the editors of Prevention Magazine, Prevention's New Encyclopedia of Common Diseases, "Diabetes," (Emmaus: Rodale Press), p. 110.

¹²Ibid., p.112.

¹³Eli Lilly and Company, "A Guide For The Diabetic," [Indiana] Feb. 1980, N.d; N. pag.

¹⁴Ibid.

¹⁵By the editors of Prevention Magazine, Prevention's New Encyclopedia of Common Diseases, "Diabetes," (Emmaus: Rodale Press), p. 113.

¹⁶Louis Sahagan, "Higher Diabetes Risk Revealed Among Chicanos and Indians." (From a report by Drs. Robert Ferrel and Michael Stern) San Jose Mercury News from the Los Angeles Times, April, 1983. N.d; N. pag.

¹⁷A Zeidler, et al., "Pancreatic Islet Cell and Thyroid Antibodies, And Islet Cell Function In Diabetic Patients of Mexican American Origin," Journal: Clinical Endocrinology Metabolism, (Maryland: The Endocrine Society, May, 1982), Vol. 54 (5); p.p. 949-54.

¹⁸Michael Waldholz, "Researchers Use Logic to Uncover, Then Break, the Chain of Diabetes," The Wall Street Journal, February 5, 1986., p.33.

¹⁹Statistics of 1984, received from Margaret Anderson, Diabetes Society of Santa Clara Valley., 15 March, 1984.p.1.

²⁰ California Center For Health Statistics, Data Matters-
Topical Reports, "Diabetes Among California Hispanics,"
Report Register no: 83-05079 (August 1983), p.1.

²¹ U.S. Department of Commerce, Bureau of the Census.
1980 Census of the United States: Population, California
Almanac, 1984/1985 ed.

²² Ibid.

²³ Simon Domiguez, ACSW, Hector B. Garcia, Ph.D. School
of Social Work, San Jose State Univ. "Health Resources For
Unemployed Latinos In The United States," Report of Community
Profile of Santa Clara County, California., 17 November 1975, p.1.

²⁴ Statistics of 1984, received from Margaret Anderson,
Diabetes Society of Santa Clara Valley., 15 March, 1984. p.1.

²⁵ U.S. Department of Commerce, Bureau of the Census.
1980 Census Summary Report: San Jose city, Population
Characteristics.

²⁶ U.S. Department of Commerce, Bureau of the Census.
1980 General Characteristics of Persons by Type of Spanish
Origin and Race for Areas and Places. San Jose city, Table 31.

²⁷ Drury, Thomas F. "Prevalence and Management of Diabetes."
Health-United States, DHHD Publication No. (PHS) 82-1232,
(December 1981), p. 25-31.

²⁸ Sahagan, op.cit, N.d; N.pag.

²⁹ Sahagan, op. cit, N.d; N. pag.

³⁰Peter H. Bennett, "The Epidemiology of Diabetes Mellitus." Diabetes Mellitus, p. 91.

³¹Lytt I. Gardner Jr., Michael P. Stern, "Prevalence of Diabetes in Mexican Americans," Diabetes, Vol. 33 (1984), 90-91.

³²Carlos Valbona, "Problems in Providing Adequate Health Care to Hispanic Population," Hispanic Mosaic: A report of The 1st Annual Forum on the Status of Hispanic Health, Marta Sotomayor, ed., (Wash. D.C. The Public Health Service Hispanic, Employee Organization, 1983) p.1.

³³Francis J. Turner, "The Diabetic Client," Differential Diagnosis and Treatment in Social Work. (New York: Free Press, 1983), p. 414.

³⁴Adelina Ortiz de Hill, "Vital Health Concerns," The National Conference On The Spanish Speaking Elderly, Shawnee Mission, Kansas., 4-7 March 1975, p. 24.

³⁵Dominguez-Garcia, op. cit. p. 7.

³⁶Sahagan, op. cit. N.d; N. pag.

³⁷Sally Salinas, "An Exploration of Perceptions of Diabetes Mellitus Among Spanish Speaking Elderly," M.S.W. Special Study. San Jose State Univ., 1985, p.1.

³⁸Salinas, op. cit.

³⁹U.S. Department of Commerce. Bureau of the Census. 1980 Census of the United States: Population- Special Release by The Rose Institute of State and Local Government. PL 94-171.

⁴⁰Census Tracts 1980, Census Tract Street Index For Santa Clara County, Published by the County of Santa Clara Environmental Management Agency, Planning Department, San Jose, California 1980 ed.

⁴¹Selltiz, Jahoda, Deutsch, Cook, Research Methods in Social Relations (New York: Holt, Rinehart and Winston, 1964), p. 50.

⁴²American Diabetes Association, Inc. "Diabetes." Educational Brochure by Southern California Affiliate, Inc. 1984, N.d; N. pag.

⁴³American Diabetes Association, Inc. "Managing Your Diabetes." Educational Brochure (New York: New York), October 1981, N.d; N. pag.

⁴⁴American Diabetes Association, Inc. "When Diabetes Strikes...Where Can You Turn.?" Educational Brochure by Southern California Affiliate, Inc. 1984, N.d; N. pag.

BIBLIOGRAPHY

American Diabetes Association, Inc. "Diabetes Educational Brochures" 2 Park Avenue, New York, New York 10016

Bennett, Peter H., Harold Riflcin and Philip Reskin, eds.

"The Epidemiology of Diabetes Mellitus." Diabetes Mellitus Maryland: Prentice Hall, 1981.

Brown Abe, "Diabetes: Good News On The Horizon," Current Health, November, 1985.

California Center For Health Statistics. "Diabetes Among California Hispanics." Report register no: 83-05079 (August 1983).

Census Tracts (1980), Census Tract Street Index For Santa Clara County-1980 Edition, April 1980. County of Santa Clara Environmental Management Agency, Planning Department 70 West Hedding Street, San Jose, CA. 95110.

The Diabetes Society of Santa Clara Valley, "To Promote Your Good Gealth," The 365 Quiz, California, 1984.

Dominguez, Simon ACSW. and Garcia, Hector B. Phd., "Health Resources For Unemployed Latinos In The United States." Report of Community Profile of Santa Clara County , California. November 17,1975.

Drury, Thomas F., et al. "Prevalence And Management of Diabetes." Health, United States. Maryland: U.S. Dept. of Health and Human Services, December 1981.

Eli Lilly and Company, "A Guide for the Diabetic," February, 1980, 307 E. McCarty St. Indianapolis, Indiana 46285.

Encyclopaedia Britannica. 13th ed. (1959), s.v. "Diabetes Mellitus," By Charles Herbert Best, M.D. and Edward Thomas Waters.

Lewy Robert, M.D., M.P.H., Preventive Primary Medicine: Reducing THE Major Causes of Mortality. New York: Little Brown and Company, Inc., 1980.

Lofquist, William A. Discovering The Meaning Of Prevention. Arizona: AYD Publications., 1983.

Lytt, Gardner I. Jr., Stern, Michael P. "Prevalence of Diabetes in Mexican Americans," Diabetes, 1984.

Mendoza John., Mendoza Virginia., Gomez William, ed. The National Conference On The Spanish Speaking Elderly. Shawnee Mission, Kansas, 1975.

Preventions New Encyclopedia of Common Diseases, "Diabetes." Rodale Press, Emmaus Pa. 1984.

Polansky, Norman A. Social Work Research. Chicago and London: The University of Chicago Press., 1975.

Rifkin, Harold., and Raskin Philip. Diabetes Mellitus- Volume V. Maryland: Prentice Hall, 1981.

Sahagan, Louis, "Higher Diabetes Risk Revealed Among Chicanos and Indians." A report by Drs. Robert Ferrel and Michael Stern. San Jose Mercury News- Los Angeles Times, N.d; N.p. April, 1983.

Salinas, Sally A. "An Exploration of Perceptions of Diabetes/ Mellitus Among Spanish Speaking Elderly." M.S.W. Special Study. San Jose State Univ., 1985.

Sanchez-Dirk, Ruth, Carlos Valbona, Marta Sotomayor, ed.

Hispanic Mosaic: A Report of the 1st Annual Forum On
the Status of Hispanic Health. Wash., D.C.: Public Health
Service, Hispanic Employee Organization, 1983.

Selltiz, Johoda, Deutsch, Cook. Research Methods in Social
Relations. New York: Holt, Rinehart, and Winston, 1964.

Smith, Audrey D., and Reid-William J. Research in Social Work.
New York: Columbia University Press., 1981.

Staggs Kimberly, "Diabetes: A Basic Primer." The Coordinator
June 1984.

Statistical data from: Diabetes Society of Santa Clara Valley,
1261 Lincoln Ave., #208 San Jose, CA. 95125.

Turner, Francis J. "The Diabetic Client," Differential
Diagnosis and Treatment in Social Work New York:
Free Press, 1983.

U.S. Department of Commerce. Bureau of the Census. 1980
General Characteristics of Persons by Type Of Spanish
Origin and Race for Areas and Places. San Jose city.

U.S. Department of Commerce, Bureau of the Census. 1980 Census
Summary Report: San Jose city: Population.

U.S. Department of Commerce. Bureau of the Census. 1980 Census
of the United States: Population- "Special Release by
The Rose Institute of State and Local Government. PL.94-171.

Valle, Ramon and Vega, William, Hispanic Natural Support Systems.
State of California, Department of Mental Health, 1980.

Waldholz, Michael, "Researchers Use Logic to Uncover, Then
Break, The Chain of Diabetes." The Wall Street Journal,
February 5, 1986.

Zeidler, A., et al. "Pancreatic Islet Cell and Thyroid
Antibodies And Islet Cell Function In Diabetic Patients
of Mexican-American Origin." Journal: Clinical Endocrinol-
ogy. Metabolism, Maryland: Endocrine Society. Vol. 54,
No. 5, May, 1982.

D

D

D

D

D

D

D

D

D

D

D