A PROVIDER'S HANDBOOK ON CULTURALLY COMPETENT CARE



LATINO POPULATION

Kaiser Permanente National Diversity Council



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INTRODUCTION

CULTURAL COMPETENCY IN CLINICAL CARE: A BUSINESS AND QUALITY IMPERATIVE



aiser Permanente is facing serious challenges: We need to control spiraling health care costs, maintain and continuously improve the quality of care we deliver to our members and face ever more competent competition. The health care consumer market is demanding hard evidence of our ability to provide high-quality, cost-effective care.

At the same time, the U.S. population and labor force is becoming more diverse than at any other time in its history. Due primarily to changes in the immigration laws, the country has experienced a major influx of immigrants and refugees over the last two decades. Less than three percent of these immigrants have been European; the vast majority have come from Asian, Latin and African nations. Added to large preexisting minority populations, this makes for an extremely rich and diverse health care consumer market with differing needs and expectations around health care services.

The term"culturally competent care" is being used by many to describe health care that is sensitive to the needs and health statuses of different population groups. Increasingly, health care organizations are being evaluated by consumers for their ability to provide such care. Additionally, studies are now indicating that ethnicity is as important a variable as age or gender in understanding health care utilization patterns and cost of care.

Incorporating cultural sensitivity in meeting our current and potential members' needs will be an important strategy in:

- Expanding our markets
- Maximizing retention rates
- Enhancing quality of care
- Containing costs

This manual is just one, albeit very important aspect of Kaiser Permanente's overall strategy for addressing diversity as a business imperative and a way of maintaining a competitive quality advantage.

Our goal in creating this handbook for Kaiser Permanente's health care professionals is to provide an overview of the cultural and epidemiological differences that characterize the major ethnocultural groups comprising our membership. It focuses on the characteristics of each group that affect health care utilization. It does not, by any means, suggest that we stereotype our members by group. Rather, the manual presents general background information and health care statistics which can help our providers become even more sensitive and knowledgeable about our diverse membership.

Where did the information in the handbook come from?

The data reported in this manual came from many articles published in medical and other health-related journals. Some information came from state and federal publications. Almost all of the data were gathered or reported in the last decade. Rather than have the pages bristle with footnotes, data sources were placed in the reference section at the end of the handbook which is divided into segments corresponding to each topic.

The data are uneven across the different ethnic groups, a state of affairs that reflects the unevenness of research in the field of ethnic medicine. For some ethnic groups, such as Mexican Americans or African Americans, there is much information. For others, such as Vietnamese or East Indians living in the U.S., information is very scanty. The loose-leaf format will allow updates when new information becomes available.

How this handbook is organized.

The sections devoted to each major subgroup will first provide pertinent demographic information, including data on the different subgroups which comprise the overall group. Next will come a segment describing the cultural characteristics of the group with special attention to the unique factors that shape health-related behavior. Following this will be the health profile for the group which summarizes risk factors and disease states. At the end of several sections, the implications of the data for Kaiser Permanente providers will be briefly summarized.

Kaiser Permanente National Diversity Council

1996



LATINOS

DEMOGRAPHICS

Thile the overall population of the United States increased by 9.8% from 1980 - 1990, the number of people of Latino origin increased by 53% during this same decade, going from 14.6 million to 22.4 million. Latinos are now 8.7% of the population. Because of high levels of immigration and natural increase, the Latino population is expected to continue to increase rapidly over the next decade, reaching 30 million by the year 2000.

Discussing a population group is difficult without using a label. However, the terms "Hispanic" and "Latino" are used to aggregate several distinct populations. We have chosen to use the term "Latino" in this manual, but wish to emphasize that most Latinos are proud to be identified by the name of their specific group of national origin.

Latinos are subgrouped as follows:

- 62% are Mexican Americans, living primarily in the Southwest, especially California and Texas.
- 12% are Puerto Ricans, living primarily in the Northeast, particularly New York, New Jersey and Connecticut.
- 5% are Cuban, living primarily in Dade County, Florida.
- 9% are other Latinos, Central and South Americans, living primarily in California.

Latinos are a classic portrait of heterogeneity, coming from different nations and cultures, with important differences in both demographic characteristics and health profiles.

• While the mean age for Mexican Americans and Puerto Ricans is 25, the mean age for Cubans, 38, is somewhat higher than non-Hispanic whites, 34.

- About 67% of adult Latinos are foreign born.
- Labor force participation among Latinos is high: 82% for Mexican Americans, 70% for Puerto Ricans, and 76% for Cubans, compared to non-Hispanic whites, 66%.
- Educational levels are highly variable: 46% of Mexican Americas and 38% of Puerto Rican adults had not finished high school, while just 13% of Cuban adults had not (U.S. 1990 Census).
- The occupation profile of Cuban Americans is very similar to that of the larger population. However, Puerto Ricans and Mexican Americans are over-represented in the laboring, service and crafts occupations.

Because of their exponential growth, Latinos are growing in influence economically, politically, and as a consumer market.

- While Latinos comprised 7.7% of the U.S. labor force in 1990, they will make up 11% by 2005. In some areas, such as Los Angeles, they will be over 50% in 2005.
- 88% of Latinos live in urban areas; only 4% are farm workers.
- Of the 50% of Latinos covered by some form of health insurance,
 72% is through an employer and 19% is self-paid.
- U.S.-born Latinos are more likely than foreign-born Latinos to have health insurance, 72% compared to 46%.

The demographic characteristics of Latino families are critical:

- About 60% of Latino adults use the Spanish language at home, 20% are bilingual and 20% are English dominant. Women are more likely to be Spanish dominant than men.
- One in 4 new households formed in the '90s will be Latino.
- Mexican Americans and Puerto Ricans have fertility rates almost twice as high as those in the general population. The median household size

is for 4.15 for Mexican Americans, 3.00 for Puerto Ricans and 3.13 for Cubans as compared to 2.66 for the U.S. as a whole.

- 38% of Latino women between the ages of 18-49 are not in the labor force compared to 25% of non-Latino women.
- One third of Latino families are below the poverty line; however, most Cuban families are middle income.
- Forty percent of Puerto Rican families are female headed as are 18% of Mexican American and 14 % of Cuban families.

Another important contributor to Latino heterogeneity is generational status: With each generation beyond immigrant status, Latinos are more likely to increase their educations, incomes, occupational mobility, fluency in English, and out-marriage rates but decrease in fertility rates.

Implications for Kaiser Permanente Providers

According to Market Development, Inc., a firm that specializes in assessing Latino consumer patterns, Kaiser Permanente serves about 6% of U.S. Latinos who have HMO coverage. As the population increasingly becomes more Latino, and if we get our share of this market, Kaiser Permanente can expect to have more Latino members.

These members will be younger than other members and have more children. There will be an especially significant impact on O.B./Gyn, Family and Emergency Practices. Many members will be non- or limited-English speaking.

An ability to provide bilingual care providers or good medical interpreters will make Kaiser Permanente more competitive in areas of high Latino population concentration, and familiarity with the health needs of Latinos will help the organization deliver high quality care.

Latinos are a generally healthy population (there is some indication, however, that the longer they are in the U.S., the more health problems they experience), but their health beliefs and epidemiological patterns are somewhat distinct from other Americans as will be seen in the following sections of the manual.

LATINO HEALTH BELIEFS AND BEHAVIORS

s with any cultural group, Latino health-related behavior is shaped by beliefs interacting with the environment. Two kinds of beliefs are important: Specific beliefs about etiology, disease characteristics, anatomy and body systems and more generalized beliefs arising out of overall cultural orientations that define what is real and what is not, what is moral and what is not and, especially, how people should appropriately interact with each other. Both kinds of beliefs are shaped and/or affected by the characteristics of the social and physical environment, its constraints and opportunities.

At this point you are wondering if generalizations about Latinos' health related beliefs can be made. The truth is that such generalizations are only possibilities and probabilities based on what is known about a cultural *group's* collection of health beliefs and behaviors. They do not describe an *individual* Latino's perceptions.

Latino health beliefs and behaviors will be shaped by at least these five factors:

- Whether the individual's heritage is Mexican, Puerto Rican, Cuban, Guatemalan or another Latin nation. "Latino" is a convenience term, grouping peoples that are similar in some ways and who share the Spanish language but are certainly not identical in culture or historical experience.
- Whether the individual is an immigrant or is U.S.-born. A third generation Latino is more likely to hold beliefs and behave more like other U.S.-born people than like people in his/her country of national heritage.
- Whether the individual is monolingual Spanish speaking or can speak English fluently. Oftentimes, though not always, inability to speak English signals a more traditional cultural perspective and a lack of familiarity with U.S. systems.
- Whether the individual is middle class or lower class. Middle class persons worldwide are more likely to have higher educations and to

have had their health beliefs shaped by education and access to biomedicine than are lower class people.

• Whether the individual grew up in an urban or rural environment. Foreign-born persons from urban backgrounds are more likely to be aware of biomedical health and disease concepts than are rural people.

Il of these variables interact to produce the individual Latino's unique pattern of health beliefs and behaviors. A Mexican-born rural-raised, monolingual Spanish speaking cannery worker is more likely to hold traditional beliefs about disease causation than a third generation English-speaking store manager. It is likely, however, that both may hold similar expectations about how health care providers should interact with patients, since cultural orientations to interpersonal behavior are much more enduring than specific beliefs.

As an example of the first type of belief, some Latino women pursue a special diet and bind their abdomens following childbirth in order to maintain a health-maintaining harmony and balance in the body and ensure that organs believed to be displaced by pregnancy return to their normal state. Similarly, a belief that the life force dwells in the heart is not uncommon and hence such concepts as "brain death" are less readily understood and accepted by some Latinos.

On the other hand, Latino patients' and their families' understanding of the proper relationship with the health care provider is guided by their cultural orientation to how authority or expert roles are seen and valued. Many Latinos living in the United States are from cultures with strong notions of social hierarchy, clear authoritarian/dependency social roles and a high regard for expert knowledge. Normative expectations for provider and patient behavior may follow these orientations.

Thus Latinos may expect the care provider to be highly directive and may exhibit what appears to be a level of dependency behavior that puzzles the provider. And, because most Latino cultures place high value on <u>respecto</u> and <u>dignidad</u> for every person, they will expect the care provider to treat them in a caring, confidential and dignified manner.

In a sense, beliefs of the first type, that is, traditional concepts of disease symptoms, causation and treatment, are easier to uncover through empathic questioning or discussion, though many Latinos who subscribe to them are at first unwilling to admit holding "traditional" medical beliefs for fear of appearing old-fashioned or non-scientific. Beliefs of the second type, those that spring from a world view or culturally shaped life perspectives, are more difficult to detect: Most people (including care providers) are more or less unaware of these abstract, culturally shaped understandings that direct their actions.

Traditional Medicine

A great deal has been written about traditional Latino diseases (<u>susto</u>, <u>moller caido</u>, <u>empacho</u>, <u>bilis</u>, <u>mal de ojo</u>, for example) and recourse to traditional healers: <u>curandero/as</u> (curers), <u>parteras</u> (midwives), <u>sobadors</u> (massagers/bone setters), <u>espiritistas</u> (spiritual healers), <u>yerberos</u> (herbalists) and <u>señoras</u> (women knowledgeable in herbal remedies). Research has shown, however, that most persons who use these traditional sources of health care also use modern medical resources if affordable and accessible. In truth, traditional or folk beliefs and use of folk healers are typical primarily of immigrant segments of the Latino population. The Hispanic Health and Nutrition Survey (HHANES) conducted in 1984 found that only 4.2% of a national sample of Latinos had consulted a folk curer (<u>curandero/a</u>), and the strongest predictors of having done so were limited English language ability and dissatisfaction with modern medical practices. Other reasons for resort to traditional healers or remedies are to pacify family members, to reassert cultural roots and to "hedge their bets."

Briefly, many Latino folk concepts of disease etiology center around the ill effects of experiencing intensely negative emotional states (fright, anger, envy), dislocation or malfunction of organs or body parts, infant susceptibility and magical causes. Folk medical treatments are highly variable across regions and Latino subcultures, even for the same disorders. Treatments involve a variety of rituals based on purification, social reintegration and, sometimes, penance. The folk pharmacopoeia is immense and complex. Boticas which carry curative herbs flourish in almost any U.S. city with a sizable Latino population.

Most traditional remedies are neutral or harmless in their effect. There have been some instances of the use of lead-containing ointments on children and salmonella-ridden rattlesnake capsules for A.I.D.s patients but these practices are rare. Usually the greatest harm from use of folk medicine lies in delayed utilization of medical care or abandonment of a treatment regimen. If a care provider suspects this type of obstacle, non-judgmental questioning may surface it. A skilled medical interpreter can often uncover folk practices in a tactful way.

More troublesome is the resort to Mexican border pharmacies for drugs requiring a prescription in the United States but not in Mexico. It is oftentimes expected that Mexican pharmacists will diagnose as well as dispense drugs, and this does sometimes occur. Many Mexicans place a good deal of faith in injections and will cross the border to obtain them. Health care providers may be surprised to find their patients taking prescription medications not listed in their charts!

The Effects of Cultural Orientations on Health Behavior

Health-related behavior shaped by Latino cultural perspectives has been given research attention in the last two decades. Several specific orientations have been noted:

- A distrust of formal institutions and an emphasis on <u>personalismo</u> expectations about the patient/provider relationship. The patient is most concerned about the relationship between him/herself and the care provider and is less concerned about the clinic, hospital or structure of the health care system. The patient wants clear evidence that the provider is concerned about him personally. Interestingly, Kaiser Permanente's STAR data bear this out: Our Latino members are significantly more likely to say that having a personal physician is important to them than are our other members.
- A belief that the involvement of significant others plays an important role in a successful treatment and healing process. This requires that others, usually family members, be included in decision making and action taking. Strong family support systems can often be enlisted in the care of Latino patients.

• A tendency toward fatalism that may or may not be linked to the "will of God." Such notions of immutable fate and an attitude of resigned forbearance are typical of poor and/or traditional peoples worldwide and are likely a rational response to experiencing many uncontrollable circumstances from floods to infectious disease to grinding poverty. Vestiges of these attitudes may persist to some degree through several generations even though the conditions which gave rise to them are no longer operative.

For example, a 1989 study of cancer beliefs among Kaiser Permanente patients in San Francisco and Alameda County disclosed that Latinos were significantly more likely than Anglos to believe that there is nothing that one can do to prevent cancer, and they were also more fatalistic about a cancer diagnosis.

- Similar to and probably shaped by the same conditions, is a lowered belief in personal self-efficacy. Studies of childbirth anxiety, for example, showed that unacculturated Mexican American women were more anxious about childbirth pain because they were less likely to perceive that they had control over the delivery process than were more-acculturated Latinas. External locus of control places the burden of prevention, diagnosis and treatment on forces external to the patient...on the provider "expert" rather than inspiring proactive behavior on the part of the patient; i.e., Latinas are less likely to breast self-exam than Anglos or to go for PAP screening.
- Linked to the above beliefs is an expectation about provider behavior:

 The provider must quickly give evidence that she/he is the powerful expert by prescribing medications, making concrete recommendations and generally maintaining a kindly but firm"take charge"attitude.

 Marketing research among Latinos has revealed that they are especially sensitive to professional dress on the part of providers.
- A tendency to somatize, especially among Latinas, e.g., the widely known malady, <u>nervios</u>, which usually refers to restlessness, insomnia, loss of appetite, headache and non-specific aches and pains, is often verbally linked to experiencing chronic, negative life circumstances, especially in interpersonal relations.

• As with other cultures, Latinos believe that good health is being free of pain, being able to carry out one's daily activities and perform one's social roles and responsibilities. It should be pointed out that many of the studies that have examined such "cultural" orientations have also found that differences between non-Hispanic whites (Anglos) and Latinos are greatly attenuated or even disappear when educational levels are controlled.

Structural Constraints on Latinos' Health Behavior

A discussion of health-related beliefs and behaviors of Latinos would be incomplete without noting the effects of structural, economic and language barriers impacting on health care service utilization in this population.

- Access to health care is significantly lower among Latinos than in the larger population. About 40%-50% of Latinos are uninsured. About 9% of Latinos receive government assisted health care.
- Mexican Americans make less use of health care than Puerto Ricans, Cubans, African Americans and non-Hispanic whites.
- Lack of access to care is largely related to the concentration of Latinos in work force sectors that receive low incomes and few or no employee benefits.
- One-third of the Mexican Americans interviewed in HHANES reported experiencing barriers to the use of health care. The barriers that actually prevented them from obtaining care were: Cost, need for child care, not knowing where to go, not having transportation, losing pay from being away from work.

Persons most likely to experience these barriers were young, female, poorly educated, and foreign born.

 Cultural factors such as lack of bilingual staff, language barriers or discriminatory treatment were infrequently mentioned as barriers. Among poor or immigrant Latinos knowledge of prevention and treatment modalities and understanding of the U.S. medical system and types of providers is limited by lack of fluency in English, low literacy in Spanish and isolation from the larger society.

Implications for Kaiser Permanente Care Providers

While a major proportion of the Kaiser Permanente Latino membership is currently made up of U.S.-born Latinos who speak English, the proportion of patients who are monolingual Spanish speakers and who have lower educations will probably increase in the next decade.

Several forces will drive this increase. The first is the increasing proportion of Latino immigrants in the U.S. work force and a limited but growing occupational mobility among Latino workers. Secondly, as has been the case in California, government policy is likely to direct government assisted health care recipients to health management organizations.

It is good to know that several studies conducted within Kaiser Permanente have shown that when Latinos become members, the barriers described above are removed. For example, a study of PAP smear utilization among over a half million Health Plan members in Southern California disclosed that Latinas were just as likely as other women to make use of these services. Another study that looked at the effects of race and poverty (measured by Medi-Cal sponsorship) on pediatric asthma care utilization showed that these two factors did not predict utilization.

Sensitivity on the part of providers to the heterogeneity of Latino health care beliefs and behaviors and to Latinos who have little knowledge and understanding of the health care system will continue to be critical.

HEALTH PROFILE OF LATINOS

This section of the handbook outlines the major risk factors related to Latino health and presents an overview of the incidence and prevalence of specific diseases.

Latino health existed. Most studies were regional or local studies of specific Latino subgroups, primarily Mexican Americans. With the completion of the Hispanic Health and Nutrition Survey 1982-1984 (HHANES), a data base that allowed comparisons across Latino subgroups and with non-Hispanic whites and African Americans was created. Despite the impetus provided by HHANES, information on smaller Latino subgroups, primarily Central Americans, remains scant. The following profile of disease patterns among Latinos therefore focuses on Mexican Americans, Puerto Ricans and Cubans.

Kaiser Permanente serves large numbers of Mexican Americans in California, Texas and Colorado and numerous Puerto Ricans in the Mid-Atlantic and Northeast Regions.

RISK FACTORS

A. Substance Abuse/Chemical Dependency

Tobacco, alcohol and drug use are major risk factors for coronary heart disease, cancer, pulmonary and liver disease, accidental injury, fetal abnormalities, premature and low birth weight infants, suicide and violence.

Smoking

- Many studies have found slightly lower prevalence rates of smoking among Latino males, 30%, as compared to non-Hispanic whites and blacks. The lower incidenceof lung cancer in Latino males has been linked to this factor.
- However, the HHANES study of a national sample of Latinos showed that for 20-74 year old Latino males, 42% of Mexican American, 40% of PuertoRican and 42% of Cuban respondents were current smokers. Cuban males 20-34 had the highest smoking rate: 50%. These rates are

higher than rates for non-Hispanic white males but lower than for blacks. Differences inreported rates across studies may be the result of changes over time or research methods.

- Latino men smoke more than Latinas.
- Some studies show that about 16% to 20% of Latinas smoke, compared to 26% for non-Hispanic white women. HHANES data show, however, that Mexican American, 24%, Puerto Rican, 30%, and Cuban, 24%, women smoke at rates similar to women in the larger population.
- Rates of smoking initiation among Mexican American and Cuban men have declined in recent years and are similar to whites.
- Rates of smoking initiation among Puerto Rican men have not declined.
- The number of cigarettes smoked per day varies across Latino males: About 52% of Puerto Rican and 64% of Cuban males smoke 20+ cigarettes a day, compared to 34% for Mexican American and 37% for non-Hispanic white males.
- Smoking rates for Latinas increase with acculturation; smoking rates among Latinos decrease with acculturation.
- Latino adolescents initiate smoking in their early teens.

Alcohol

- There are significant differences across the major Latino groups in terms
 of alcohol consumption, with Cuban men and women tending to be light
 drinkers and Mexican American men and women the heaviest drinkers
 and Puerto Ricans falling between.
- There are particularly strong gender differences in alcohol use in adult Latino populations with the gender differential being greatest among Mexican Americans. Mexican American men are heavier drinkers than non-Hispanic white men and Mexican American women are much lighter drinkers than white women.

- Mexican men drink less frequently than men in the U.S. but drink larger quantities per occasion. Upon migrating to the U.S., many Mexican men adopt more frequent drinking practices resulting in high frequency, high quantity drinking.
- Heavy drinking occurs in roughly 40% of Latino men aged 18-39.
 Unlike males in the larger population, heavy drinking and alcohol-related problems do not decline after age 30, but continue at high levels untilage 50.
- Alcohol dependence is the *only* mental health problem reported by more Mexican American men than men in the general population according to the Epidemiological Catchment Area Survey.
- Immigrant women are most likely to be abstainers, second generation women, light drinkers, and by the third generation, Latinas have adopted the moderate drinking practices typical of women in the larger population.
- Among Mexican American women, unlike their male counterparts, alcohol use and alcohol problems are more common among the better educated and higher income women.
- Latinos, like other Americans, begin use of alcohol in early adolescence.
 By age 18, nearly half of adolescents in all Latino groups have used alcohol.
- Among Latino teenagers, the gender gap is closing rapidly, with alcohol
 use now almost as prevalent among girls as boys. This very recent
 change may soon be reflected in adverse effects on rates of low
 birthweight and infant mortality which have been up to now quite
 favorable for Latinos.

Drug Abuse

Analysis of the HHANES data for the 1982-1984 survey shows that lifetime and one-year prevalence rates for marijuana and cocaine use were higher for Latinos age 18-24 as an aggregate group than for non-Hispanic whites.

However, very significant differences existed among Latino subgroups and between genders within subgroups.

• Marijuana

50% of Mexican American and Puerto Rican men had used marijuana at some point in life; for Cubans, 31%.

31% of Puerto Rican, 20% of Mexican American and 12% of Cuban women had used marijuana.

• Cocaine

41% of Puerto Rican, 20% of Mexican American and 12% of Cuban menhad used cocaine.

21% of Puerto Rican, 6% of Mexican American and 7% of Cuban women had used cocaine.

 Lifetime and previous year prevalence of marijuana and cocaine were linked positively to acculturation (measured by level of English language use) at all socioeconomic levels but especially among Latinos with low educations.

Adolescent Drug Use

Persons 19 and under comprise 38% of all Latinos compared to 20% for non-Hispanic whites, and represent an added challenge so far as substance abuse is concerned. Substance abuse in among Latino youth, as with other youth, is associated with dropping out of school.

- Marijuana has been used by 50% of Puerto Rican, 46% of Mexican American and 24% of Cuban Americans by age 18.
- Cocaine has been used by 20% of Puerto Rican and 7% of Mexican Americans and Cuban Americans by age 18.
- Hispanics between the age of 12 and 17 were in between African American and non-Hispanic white youths in overall drug use rates with non-Hispanic whites being the highest.

- Hispanic children age 12 to 17 reported the highest rates of cocaine use but they were lower in marijuana use than African American and white youth.
- Hispanic youths use inhalants and sedatives at higher rates and heroin at lower rates than white youths.

B. Obesity and Centralized Fat Distribution

Obesity is an established risk factor for cardiovascular disease, diabetes mellitus II, gallbladder disease and some forms of cancer.

Obesity is a definite risk factor among Latinos, contributing significantly to higher incidence (2 to 4 fold that of non-Hispanic whites) of non-insulin dependent diabetes (NIDDM) and gallbladder disease.

Overweight = A Body Mass Index (BMI) equal to or greater than the 85th percentile of the total U.S. population.

Severe Overweight or Obesity = a BMI equal to or greater than the 95th percentile of the total U.S. population.

By these indicators, data from the HHANES show that:

- 30% of Mexican American males are overweight; 10% are severely overweight.
- 39% of Mexican American women are overweight; 16% are severely overweight.
- 25% of Puerto Rican males are overweight; 8% are severely overweight.
- 37% of Puerto Rican women are overweight; 14% are severely overweight.
- 29% of Cuban males are overweight; 11% are severely overweight.
- 34% of Cuban women are overweight; 8% are severely overweight.

The previous figures exceed prevalence of non-Hispanic white and black males by 4-5 percentage points for overweight; and exceed prevalence for non-Hispanic white females by 10%-15%.

- Some research shows that among Mexican American women, acculturation and higher income is negatively associated with overweight but not for men.
- Overweight appears to begin earlier among Latino children than children in the larger population, especially for girls.
- Overweight Latino mothers tend to prefer chubby babies.

The concentration of fat on the trunk or abdomen relative to the limbs or lower body, centralized body fat distribution, has also been shown to be associated with a number of serious metabolic disturbances and chronic diseases. Centralized fat distribution is prevalent among Latinos, with Mexican Americans particularly susceptible.

• The percent of centralized adiposity is greater in Mexican American men (24%) and women (40%) as compared to non-Hispanic whites (20% and 25%, respectively).

Latinos also have higher incidence of hyperlipidemia with the following features:

- Average cholesterol is the highest (222.9mg./100 ml) among all population groups in the U.S.
- Significantly higher triglycerides than other groups.
- Lower levels of high density lipoprotein.
- Total cholesterol and low density lipoprotein become even higher with acculturation, particularly for Mexican American women.

C. Diet and Nutrition

Latinos generally are similar to the larger population in dietary characteristics even though there are some underlying differences associated with place of origin (i.e., Caribbean, Mexico, Central America). Analysis of HHANES dietary recall data revealed that the major sources of energy and nutrients among Latinos were similar to those seen for non-Hispanic whites and African Americans. Cultural differences in food preferences appeared to be most frequently expressed in food names, recipes, methods of preparation and condiments rather than differences in principal sources of nutrients.

Weaknesses of Latino diets:

- Food preparation methods tend to add animal fats in the formof lards, cheeses and creams.
- There is a preference for high fat meats such as pork and organ meats.
- 25% of Mexican American children and 50% of teenagers consumed fruits and vegetables less than once a day.

Health problems thought to be related to Latino diets include:

- High prevalence of obesity.
- Very high prevalence of diabetes II.
- High prevalence of anemia among Mexican American women.
- High incidence of suboptimal growth among some Latino children.

Strengths of Latino diet:

- Has complex carbohydrate staples.
- Consumption of vegetables and fruits high in Vitamin A and C is common.

- Vegetable protein sources rather than animal protein are given more emphasis. Corn and beans eaten together provide complementary proteins.
- Less milk and dairy products are consumed than in the larger U.S. population.
- Diets are high in fiber, calcium, phosphorus, niacin.
- Cholesterol intake appears to be lower. Animal fat is important but contributes proportionately less to total calories than in other populations.
- Mid-day meal is the heaviest among the less acculturated.
- Greater reliance on stews and mixed meat/vegetable dishes.

Implications for Kaiser Permanente Care Providers

The growing rates of smoking, alcohol and drug use among adult Latinas and girls is a critical problem. It has commonly been assumed that the strong norms against use of alcohol and other drugs within Latino cultures served as a protective factor for the health of women and infants. Prenatal education for Latinas around use of alcohol, drugs and tobacco is especially needed.

The enduring high rates of alcohol use among Mexican American men are reflected in their problems with cirrhotic liver disease as well as significant family and employment problems. An increasing need for chemical dependency screening and treatment will be important as this population increases in our membership.

Preventive education and emphasis on early weight control will be increasingly important both in terms of reducing health risks and containing costs in serving the Latino membership since this risk factor plays such a pivotal role in exacerbating complications in so many disease states. Emphasizing the strengths and eliminating the weaknesses of the Latino diet can play an important role.



MAJOR DISEASES

A. Diabetes Mellitus

There is a much higher prevalence of diabetes among Mexican Americans than non-Hispanic whites and the excess prevalence is exclusively limited to non-insulin-dependent-diabetes (NIDDM). While Puerto Ricans also have higher rates than whites, the vast majority of studies devoted to Latino diabetes have focused on Mexican Americans.

The following summarizes the problem among Mexican Americans:

• Mexican American male incidence: 6.8%

• Mexican American females: 7.6%

• Non-Hispanic white males: 2.8%

• Non-Hispanic white females: 3.0%

Increased complications include:

- younger age at onset
- rapid development of acuity
- greater metabolic severity
- longer duration of disease

These increased rates and complications are thought to be related to but not entirely explained by:

- high levels of obesity, though non-obese Latinos are still at higher risk than non-Hispanic whites
- level of American Indian genetic background
- poor dietary control

Studies have found that many more non-diabetic Mexican Americans than whites are hyperinsulemic.

Late diagnosis and higher rates of NIDDM as well as poor control in diagnosed cases result in:

- higher rates of diabetic retinopathy
- a rate of end-state renal disease some studies have found to be six times higher than in the general population
- increased risk for coronary heart disease
- a gestational diabetes rate that is three times higher than among whites

Acculturation and increased incomes are linked to a decreased prevalence of NIDDM among women, but almost no reduction in men.

Implications for Kaiser Permanente Care Providers

With increasing numbers of Latinos entering Kaiser Permanente membership, the level of NIDDM in this population will be a cost containment and service challenge. This challenge can in part be met by:

- early screening for prediabetic symptoms
- comprehensive patient/family education on diet

B. End State Renal Disease (ESDR)

Given the high rates of NIDDM among Mexican Americans, it is not surprising to find the rates of ESRD correspondingly elevated in this group. A large Texas study reports three year incidence rates:

- Mexican Americans have a 2.4 to 3.4 times higher incidence of ESRD than non-Hispanic whites but about 2/3 that of blacks.
- Mexican Americans have between 4.5 and 6.6 times the rate of <u>diabetic</u> ESRD than non-Hispanic whites and 1.2 and 1.9 times that of blacks, accounting for about half the diagnosed ESRD.
- Despite similar rates of hypertension, Mexican Americans had rates of hypertensive ESRD 2 to 3 times that of whites.

Studies also suggest that HIV-associated nephropathy may occur relatively more often in Latinos than in non-Hispanic whites.

C. Gallbladder Disease

Ultrasonography diagnostic techniques used in the HHANES disclosed the following prevalence of gallbladder disease (gallstones + cholecystectomy) among Latino groups:

- Mexican American males = 7.2%
- Mexican American females = 23.2%
- Puerto Rican males = 4.0%
- Puerto Rican females = 15.4%
- Cuban males = 4.2%
- Cuban females = 13.5%

Older Mexican American women show very high prevalence: 30% of all Mexican American women will have either radiographic/ untrasonographic evidence of gallstones or have undergone a cholecystectomy by age 60.

The high rates of gallbladder disease for Mexican Americans appears to be linked to:

- American Indian genetic admixture
- Overall body adiposity
- Centralized adiposity among women but not among men

However, with both overall and central adiposity controlled, differences between Mexican Americans and non-Hispanic whites were still significant.

D. Cardiovascular Diseases

Coronary and Ischemic Heart Disease

While coronary heart disease is for Latinos, as with other Americans, the leading cause of death, variation by subgroup within the Latino population and the relationship of disease to risk factors are important considerations.

Comparative mortality rates per 100,000 for CHD, taken from the <u>Analysis of Health Indicators for California's Minority Populations</u> exemplify variation among Latinos:

• Mexican Americans: 88

• Puerto Ricans: 94

• Cubans: 92

• non-Hispanic whites 121

• Blacks: 188

Other studies also show that cardiac mortality is 15% to 35% lower than among non-Hispanic whites, depending on the subgroups studied.



A number of puzzles pervade the epidemiology of CHD among Mexican Americans particularly:

- Although risk factor profiles (Type A personality, obesity, diabetes, hyperlipidemia, high systolic and diastolic blood pressure, lack of exercise) are similar or unfavorable compared to non-Hispanic whites, Mexican American men generally are less likely to have electrocardiographic evidence of myocardial infarction and exhibit ischemic mortality rates 20% to 25% lower than whites.
- For example, Mexican Americans of both sexes have a threefold higher prevalence of diabetes than non-Hispanic whites. However, rates of CHD along diabetic Mexican Americans are lower than for diabetic whites, though there are no differences among non-diabetics.
- Nonetheless, studies show that the physiological association between diabetes and myocardial infarction and cardiovascular risk factors is the same among Mexican American men and women and non-Hispanic whites.
- Researchers hypothesize a yet unidentified protective factor, possibly genetic, that operates differently for Latin men than women.

Despite the apparent protective factors, cardiovascular mortality, while declining among Mexican American men, is not dropping at the rate experienced by men in the large population. This slower rate of decline is attributed to:

- Less knowledge about the relationship between risk factor and CHD among Latinos
- Lower access to health care
- Lower compliance with treatment and control of diabetes

Hypertension

The evidence regarding levels of hypertension in Latinos is contradictory. The prevalence reported in the HHANES, based on a single reading, are as follows:

- Mexican American men = 16.8%
- Mexican American women = 14.1%
- Puerto Rican men = 15.6%
- Puerto Rican women = 11.5%
- Cuban men = 22.8%
- Cuban women =15.5%

These prevalence rates are lower than those found among non-Hispanic whites and Blacks. A number of studies, such as the San Antonio Heart Study, on the other hand, report higher levels of hypertension in Latinos than in non-Hispanic whites based upon multiple readings.

Important findings regarding hypertension in Latinos include:

- Among Puerto Ricans and Mexican Americans up to 50% of hypertensives are undiagnosed; among diagnosed hypertensives, control is poor. Latinos are less likely to control their hypertension than Latinas.
- As a result of poor blood pressure control, there is an approximate 2.5 fold increase in end state renal disease as a complication of hypertension among Latinos.

- Access to health care and having a personal physician are correlated with increased control among Latinos.
- Rates of hypertension increase with decreases in socio-economic status in Latino populations.
- Mexican Americans have significantly higher rates of hypertension than Mexicans in Mexico City.
- There appears to be no linear association between acculturation and hypertension, however.

Cerebrovascular Disease

Comparative mortality rates per 100,000 for cerebrovascular disease exemplified by data from the California analysis of health indicators show variation across Latino subgroups:

• Mexican Americans: 25

• Puerto Ricans: 38

• Cubans: 26

• non-Hispanic whites: 28

• Blacks: 50

As with other populations in the U.S., cerebrovascular disease is declining among Latinos.



E. Cancer

Generally speaking, Latinos have a lower prevalence of many kinds of cancer than persons in the general population. However, Latinos not only differ from non-Hispanic whites and African Americans, but Latino subgroups differ from each other in terms of primary cancer sites.

- For Mexican Americans, cancers of the cervix, vagina/vulva, testis, eye, central nervous system, stomach, liver, gallbladder, bone, soft tissues, and thyroid as well as Hodgkins disease and leukemia were reported more frequently in the National Cancer Data Base.
- For mainland Puerto Ricans, cancers of the esophagus, stomach, liver, bone, skin (excluding melanoma), cervix and penis as well as lymphomas were most frequent.
- For Cuban Americans, cancers of the rectum, gallbladder, skin (excluding melanoma) and central nervous system as well as lymphomas were most frequently reported.

For 7 out of 8 types of cancer studied in the National Cancer Data Base, Latinos, particularly Mexican Americans, had a less favorable stage of disease than non-Hispanic whites at first diagnosis.

Other specific issues related to cancer in Latinos are:

• Invasive cervical cancer among Mexican American and Cuban women is two to three times more prevalent in these two groups than it is among non-Hispanic whites. It is about seven times as prevalent among foreign-born Latinas as among non-Hispanic whites. The following factors are found to be contributory to increased incidence of cervical cancer among Latinas:

low education
long interval between PAP smears or no PAP screening
years of smoking
non-use of barrier contraceptives
frequency and years of douching
history of genital warts
number of sexual partners before age 20
lack of access to health care
lack of knowledge about need for screening
spouses/partners with many sexual contacts

Several studies, including studies done at Kaiser Permanente in Southern and Northern California, indicate that Latinas with access to health care are no less likely to have had PAP screening than other women.

- While the rates of breast cancer in Latinas (except for Cuban women) is significantly lower (30%) than in white and black women, several studies have shown that non-English speaking Latinas present with later stage disease than other women and are significantly less likely to have had a mammogram.
- Some studies suggest that the lower prevalence of breast cancer may be due to lower levels of smoking and high fiber diets.
- Mexican American women are at higher risk for gallbladder and other biliary cancers than women in the larger population. and onset appears to be earlier. Women who are born in the United States have higher rates than Mexican-born women. Studies suggest these high rates may be related to:

Amerind genetic factors obesity dietary factors

- Among males, Mexican Americans have twice the rates of testicular cancer as non-Hispanic white males, but Puerto Rican and Cuban males have lower rates than whites.
- On the other hand, Mexican American men have significantly lower rates of prostate cancer than whites and blacks but Puerto Rican men, particularly, and Cubans have higher rates.

Migration from Puerto Rico to the mainland U.S. appears to have significant effects on the incidence of two cancer sites:

- Colorectal cancer rates increase twofold, though remain lower than whites.
- Stomach cancer decreases slightly and mortality rates are much more favorable.

Implications For Kaiser Permanente Care Providers

Some of the challenges facing providers treating cancer in Latinos are:

- delay in reporting symptoms
- reluctance to have examination by male provider on the part of women or their husbands
- fatalistic attitude toward cancer
- misconceptions about the causes of cancer
- paucity of culturally sensitive educational materials on cancer and cancer screening
- significant variation in cancer sites and rates across Latino subgroups

F. Infectious Diseases

Tuberculosis

Since the mid-80s, tuberculosis has been on the rise, particularly in minority groups. This is a disappointing setback for a nation where the disease was reduced from 84,000 cases in 1954 to 22,500 cases in 1987. The current increase is attributable in large measure to the recent influx of large numbers of immigrants from nations where this disease is more prevalent, including Latin nations. Comparative incidence rates:

• TB rate for U.S. 9/100,00	00
• TB rate for non-Hispanic whites	00
• TB rate for Mexican Americans	00
• TB rate for Puerto Ricans	00
• Latino men with TB:	В
• Latino women with TB:	В
• U.Sborn Latinos	В
• Foreign-born Latinos 53% of Latino Total T	В

Some of the issues complicating the effort to control TB among Latino patients are:

- non-compliance for a variety of reasons to preventive regimens
- movement back and forth across the U.S./Mexico border
- drug resistance
- lack of information
- concurrent HIV infection
- lack of access to health care
- only 60% of Latino TB patients converting to negative sputum when 95% conversion is expected

Acquired Immune Deficiency Syndrome (AIDS)

Center for Disease Control figures indicate that rates for AIDS are significantly higher for Latinos than for non-Hispanic whites. However, there are very important differences across Latino groups in terms of incidence and exposure patterns as can be seen in the national cumulative incidence per 100,000 data for 1981-1988:

Group	CI	Gay non-IVDAs	Hetero IVDAs
U.Sborn Latinos	51.7	21.7	20.9
Mexican-born	25.3	18.7	1.0
Puerto Rican-born	181.2	45.9	104.3
Cuban-born	118.0	97.2	5.3
All Latinos	70.8	32.1	26.3
Non-Hispanic whites	25.7	19.9	1.7

Puerto-Ricans were the only Latino group in whom most AIDs cases were in heterosexual intravenous drug users; for other Latino groups, the proportion of cases in heterosexual IVDAs was 10% or less. It is estimated that 38.7% of AIDS among Latinos is due to IV drug use.

Another factor which contributes to the higher incidence of AIDs in Latinos is the amount of unrecognized bisexual behavior among Latino men. Many men choose to identify as heterosexual and can do so because homosexuality is frequently defined differently among some Latin cultures: Men are not identified as homosexual unless they play the passive, receptor role.

Other characteristics that describe AIDS in the Latino population:

- The risk of AIDS for Latino men is 2.7 times higher than whites.
- The risk of AIDS in Latino women is 8.1 times that of white women.
- The risk of AIDS in Latino children is 6.6 times that of white children.
- The risk of AIDS in Latino women with a bisexual partner is 3.6 times that of white women with bisexual partners.
- Latino patients with AIDS are diagnosed later and die more quickly of AIDS.
- Hispanic women have less knowledge of AIDS.
- Gender role constraints around female modesty and male dominance in sexual behavior may make it less likely for Latinas to suggest condom use than non-Hispanic white women.
- The incidence of Latinas with multiple sex partners is low.



Implications for Kaiser Permanente Care Providers

Providers in different regions are likely to be dealing with Latino populations that have different exposure patterns. AIDS patients in our Northeast Region are more likely to have been exposed by intravenous drug use of self or spouse. Those in California or Texas most probably were exposed through same sex sex or through a bisexual spouse.

Since exposure patterns are different, patient education may need to have a different focus in the various Latino groups.

Gender role issues may make it important for separate, culturally relevant education and prevention programs for men and women.

Other Infectious Diseases

Current data indicate that there are a number of other infectious diseases that cause disproportionately increased morbidity in Hispanics. The high rate of poverty with associated socio-environmental problems, increased barriers to health care and importation of infectious diseases from the countries of origin are some of the reasons that account for the disparity. Some of the most common diseases are cysticercosis, hepatitis A, syphilis and typhoid fever.

 Preschool measles outbreaks are a particular problem among Latino children. In an analysis of health indicators for Latinos in California, comparative incidence rates for measles were:

Latino, 63.3, White, 11.2, Black, 38.6 and Asian, 21.2

Reasons for these differences include:

- Immunization coverage among Latinos in a given area is insufficient (e.g., below 95%) to halt measles transmission.
- Delayed immunization among those who are vaccinated.

Immigrant Screening

Although immigrants are by and large healthier than U.S.-born Latinos because they are less likely to suffer from chronic life style diseases, recommended screenings for newly immigrated Latinos include:

- hepatitis B in prenatal patients
- iron-deficiency anemia
- intestinal parasites

Implications for Kaiser Permanente Care Providers

Since increasing immunization rates is one of the quality improvement goals in many regions, regions with large Latino memberships may wish to assess how special outreach efforts targeted to Latino parents can help them reach their goals.

Initial screening of immigrant patients might include tests for diseases found predominantly in immigrant groups.



CHILDBIRTH

Birth rates among Latinas are higher than among U.S. women in general:

- Latinas (all groups): 94 births per 1,000 women
- Mexican Americans: 98.5 births per 1,000 women
- U.S. General Population: 68.5 births per 1,000 women
- The Puerto Rican birth rate is similar to that of Mexican Americans; since the Cuban population is considerably older, their birth rate is similar to that for other Americans.

Childbearing among Latinas begins at a younger age and continues for more years as compared to non-Hispanic women. However, this general tendency is mediated by several factors as illustrated in a study of Los Angeles Latinas:

- Mexican-born Latinas have the lowest rate of early sexual intercourse, but the highest rate of early births, compared to non-Hispanic whites, because they are more likely to become pregnant if sexually active and more likely to give birth if pregnant. These women also have the highest rate of early marriage.
- U.S.-born Mexican Americans are more like non-Hispanic whites in that they initiate sexual activity early, are less likely to become pregnant, and if pregnant, more likely to terminate.

Further, there is considerable difference in early pregnancy prevalence rates among Latina subgroups:

- Mexican American: 31% among females age 15-19
- Puerto Ricans: 30% among same age group
- Cubans: 19% among same age group

Infant health among Latinos is generally better than among non-Hispanic whites and blacks in terms of low birth rate and infant mortality:

- Mexican American women have a relatively low incidence of low birth weight babies (similar to U.S. rate of 6%).
- Cuban-born women have an even lower rate than U.S. average.
- Infant mortality rates vary across Latino subgroups: 5.3/1,000 and 5.5/1000 for Mexican Americans and Cubans, 11.8/1,000 for Puerto Ricans.

The relatively low infant mortality rate for Mexican Americans is especially noteworthy when one considers multiple adverse factors surrounding Mexican American mothers including:

- poverty levels
- comparatively low access to health care
- immigrant status for many
- high incidence of teen pregnancy
- high percentage of single mothers at 31%, compared to 15% for non-Hispanic whites but 53% among Puerto Ricans and 16% among Cubans
- low levels of education among many
- low levels of prenatal care

Several explanations have been put forward to explain this paradox:

- lower levels of alcohol use and smoking among Mexican American women
- high levels of familial support
- under-reporting due to undocumented status
- genetic effects

Improvement of access to prenatal care may improve the already favorable infant mortality rates.

Complications of pregnancy especially noted for Latinas include:

- Excessive weight gain. One study found that 52% of overweight and 75% of obese Latinas in Los Angeles had excessive gains based on the standards of the Institute of Medicine.
- Gestational diabetes. A study conducted at the University of California, San Diego medical center reported 51% of their cases of gestational diabetes over a two year period were Latinas.
- Immigrant Mexican American women may be on a diet which is not well balanced, for they may have a tendency to avoid foods traditionally labeled as "cold" such as fruits and vegetables in the belief that pregnancy makes their bodies warm. Their diets may be excessive in total calories but deficient in protein, essential minerals and vitamins.

Childbirth anxiety

- Less-acculturated Mexican American women have more prenatal anxiety, less desire to control labor and delivery, are less assertive and expect more pain during labor and delivery than more acculturated women.
- Norms for father participation in labor and delivery also vary with acculturation levels, with more acculturated Latinos, especially in the middle class, more comfortable with participatory role. Less acculturated women may be more comfortable with female relatives present at childbirth.

Breastfeeding

Fewer Latinas tend to breastfeed than non-Hispanic whites. One study has indicated that the likelihood of Latinas breastfeeding is about one-third that of non-Hispanic whites. Research has shown that:

• Some Latinas who do breastfeed do not start until milk production begins out of a belief that colostrum is "not fit" for the infant.

- Some Latinas do not breastfeed out of a belief that it is not "modern" to do so.
- Women in Mexico tend to breastfeed for about 6 months; there is a belief that prolonged breastfeeding produces an ill-mannered child.
- In Mexico, numerous dietary practices such as drinking atole made up of corn and sesame seeds are believed to be <u>galactogue</u> or milk promoting.
- Studies indicate that employment status and husband's wishes impact on a Latina's decision to breastfeed.



Implications for Kaiser Permanente Care Providers

In regions with high Latino populations, such as Texas, Northeast and California, providers should expect that a large number of their obstetrical patients will be Latinas. In areas with numerous immigrants, provision should be made for Spanish language prenatal education.

Diabetes in pregnant Mexican American women is a serious and expensive health problem. These pregnancies present an opportunity for cost-effective preventive health care, including individualized management, earlier diagnosis and treatment and improved short-term and long-term infant outcomes.

The number of teen and single pregnancies in this population appears to highlight the need for special programs in Adolescent Medicine departments.

PUERTO RICAN HEALTH CARE ISSUES

The Hispanic population on the east coast is quite diverse and, although there is limited specific data available, it is may be useful to consider the Puerto Rican experience.

The median age for the population of territorial Puerto Rico is about 29 years, while the birth rate is about 18.1 per 1,000 and the death rate is about 7.4 per 1,000.

Major Causes of Death in Puerto Rico

Preliminary data from the Department of Health of Puerto Rico indicates that heart disease is the primary cause of death, while cancer and diabetes run second and third, respectively. Following is a summary of the ten most frequent causes of death for 1991:

Cause of Death	Rate Per 1,000
1. Heart Disease	160.7
2. Cancer	121.7
3. Diabetes	47.3
4. AIDS	35.9
5. Cerebrovascular disorders	35.0
6. Pneumonia	31.8
7. Accidents	30.7
8. Hypertension-related disorders	26.9
9. COPD	25.1
10. Liver disease and cirrhosis	23.3

Perinatal Care

Infant deaths have been documented at 13.4 per thousand live births, while neonatal mortality is about 9.7 per 1,000. Pre-term delivery and low birth weight have been implicated as the main causes of death for this age group. Low birth weight runs at about 0.2%, while early prenatal care is close to 73%.

Risk factors related to the mothers are important since 3.2% were diagnosed as having pregnancy-related hypertension and 1.8% as having diabetes. C-section was high at 31%.

In addition, about 38% of babies are born from unwed, single mothers; 18.9% of mothers are teenagers or younger than 20 years of age.

Nutrition

One of the most dramatic changes that has been documented is related to dietary habits and the transition from nutritional deficiencies to health problems associated with over-consumption of food, alcohol an cigarettes which result in high rates of obesity, arteriosclerosis, heart disease, cirrhosis and cancer.

In general terms, the Puerto Rican diet is about 16% protein, 38% fat, and 46% carbohydrates.

Infectious Diseases in Puerto Rico

Although AIDS appears now as a major cause of death, the incidence of other communicable diseases shows that gastroenteritis, influenza and dengue are prevalent disorders among Puerto Ricans. The table below shows the most prevalent disorders with high morbidity in the island in 1982.

Disorder/Disease	Incidence/ 1,000
1. Gastroenteritis	836.1
2. Influenza	436.7
3. Dengue	279.2
4. Gonorrhea	83.3
5. Chicken Pox	25.9
6. Syphilis	
7. Tuberculosis	
8.Hepatitis B	
9. Salmonella	
10.Hepatitis A	
10.1 1cpatitio 1 1	0.0

In 1990, Puerto Rico reported an incidence of AIDS of 52.2 per 100,000. In fact, this rate is the second highest among the states and territories of the United States. From 1981 to 1991 there were 6,288 cases on the island.

Intravenous drug users are the largest group at risk for AIDS in Puerto Rico and among Puerto Ricans in the United States.

Natural Support Systems

The support that Puerto Ricans receive from their natural support systems allows them to cope with an environment that includes racism, crime, poverty, and poor housing conditions. Individuals who receive more support are less likely to experience stress and emotional disturbances as well as substance abuse.

"Puerto Rican Syndrome"

There has been a belief that a set of particular hysterical symptoms presented by Puerto Ricans during times of stress were truly a syndrome. However, among 118 young Hispanic (101 Puerto Rican) psychiatric inpatients, somatic complaints, violence, suicidal tendency, hallucinations, sudden onset of symptoms, and dissociative behavior each occurred in 46% or more patients. There was no difference in clinical presentation between island Puerto Rican patients and those raised on the mainland. There is no relationship between these behaviors and any specific psychiatric disorder.



REFERENCES

Demographics

Hispanic Americans. Special Report (1992). <u>American Demographics</u>. Ithaca, New York

Census Data (1990). United States Census Bureau Report.

Goldsmith, M.F. (1990). Forum focuses on Hispanic-American health. <u>Journal of the American Medical Association 263(5)</u>, 622.

Health Insurance. (1994). Hispanic Perspective, 1(1):4

Munoz, E. (1988). Care of the Hispanic Poor: A growing segment of American Society. <u>Journal of the American Medical Association</u>, 260(18).

Latino Health Beliefs and Behaviors

Buchwald, D., Caralis, P.V., Gany, F., et al. (1993). The medical interview across cultures. <u>Patient Care</u>. April 15, 1993.

Bundek, N., Marks, G. & Richardson, J. (1991). Role of health locus of control in cancer screening of elderly Hispanic women. <u>Health Psychology</u>. 12(3), 193.

Estrada, A.L., Trevino, F.M. & Ray, L.A. (1990). Health care utilization barriers among Mexican Americans: Evidence from HHANES 1982-1984. <u>American Journal of Public Health, 80</u> (Supplement): 27-31.

Kay, M.A. (1977). Health and illness in a Mexican American barrio. In E.G. Spicer (ED.) Ethnic Medicine in the Southwest. Tucson: University of Arizona Press.

Kleinman, A., Eisenberg & Good, B. (1978). Culture, illness and care. Clinical lessons from anthropologic and cross-cultural research. <u>Annals of Internal Medicine, 88</u>, 251-258.

Maduro, R. (1983). Curanderismo and latino views of disease and curing. <u>The Western Journal of Medicine</u>, 139(6), 64.

Perez-Stable, E.J., Sabogal, F., Otero-Sabogal, R., et al. (1992). Misconceptions about cancer among Latinos and Anglos. <u>Journal of the American Medical Association</u>, 268 (22), 3219.

Rubel, A.J., O'Nell, C.W. & Coliado-Ardon, R. (1984). <u>Susto A Folk Illness</u>. Berkeley: University of California Press.

Scheper-Hughs, N. & Steward, D. (1983). Curanderismo in Taos County, New Mexico – A possible case of anthropological romanticism? <u>The Western Journal of Medicine</u>, 139(6), 71.

Schreiber, J. & Homiak, J.P. (1981). Mexican Americans. In A. Harwood (Ed.). <u>Ethnicity and Medicine.</u> Cambridge: Harvard University Press.

Substance Abuse/Chemical Dependency

Amaro, H., Whitaker, K., Coffman, G. & Heeran, T. (1990). Acculturation and marijuana and cocaine use: Findings from HHANES 1982-1984. <u>American Journal of Public Health, 80 (Supplement</u>): 54-60.

Burnam, M.A. (1989). Prevalence of alcohol abuse and dependence among Mexican Americans and non-Hispanic Whites. In D. Spiegler, et. al. (Eds.), <u>Alcohol Use Among U.S. Ethnic Minorities</u>. (DHHS Publication No. [ADM] 89-1435). Washington, D.C.: U.S. Government Printing Office.

Caetano, R. (1988). Alcohol use among Mexican Americans and in the United States Population. In M.J. Gilbert (Ed.). <u>Alcohol Consumption Among Mexicans and Mexican Americans: A Binational Perspective.</u> Los Angeles: UCLA, Spanish Speaking Mental Health Research Center.

Caetano, R. (1988). Alcohol abuse among Hispanic groups in the United States. American Journal of Drug and Alcohol Abuse, 14, 293-308.

Cervantes, R.C., Gilbert, M.J., Salgado de Snyder, N. & Padilla, A.M. (1990). Psychosocial and cognitive correlates of alcohol use in younger adult immigrant and U.S.-born Hispanics. <u>International Journal of the Addictions (91)</u>, 687-708.

Chavez, E.L., Edwards, R., Otting, E.R. (1989). Mexican Americans and White American dropouts, drug use, health status and violence. <u>Public Health Report, 104(6)</u>.

Escobedo, L.G., Remington, P.L. & Anda, R.F. (1989). Long-term secular trends in initiation of cigarette smoking among Hispanics in the United States. <u>Public Health Report</u>, 104(6), 583-587.

Gilbert, M.J. (1991). Acculturation and changes in drinking patterns among Mexican American women. <u>Alcohol Health and Research World</u>, 15, 234-238.

Haynes, S.G., Harvey, C., Montes, H., Nickens, H. & Cohen, B.H. (1990). Patterns of cigarette smoking among Hispanics in the United States: Results from HHANES 1982-1984. American Journal of Public Health, 80 (Supplement): 47-53.

Johnson, E.M. & Delgado, J.L. (1989). Reaching Hispanics with messages to prevent alcohol and other drug abuse. <u>Public Health Reports</u>, 104(6), 588-594.

Marin, G., Perez-Stable, E.J. & Marin, B.V. (1989). Cigarette smoking among San Francisco Hispanics: The role of acculturation and gender. <u>American Journal of Public Health</u>, 79(2), 196-199.

Perez-Stable, E.J., Marin, B.V. & Marin, G., et al. (1990). Apparent under reporting of cigarette consumption among Mexican American smokers. <u>American Journal of Public Health, 80(9)</u>, 1057-1061.

Obesity and Fat Distribution

Diehl, A.K. & Stern, M.P. (1989). Special health problems of Mexican Americans: Obesity, gallbladder disease, diabetes mellitus, and cardiovascular disease. <u>Advances in Internal Medicine</u>, 34, 73-96.

Forman, M.R., Trowbridge, F.L. & Gentry, E.M. et al. (1986). Overweight adults in the United States: the behavior risk factor surveys. <u>The American Journal of Clinical</u> Nutrition, 44, 410-416.

Kumanyika, S. & Helitzer, D.L. (N.d.), Nutritional Status and Dietary Pattern for Racial Minorities in the United States. Report of the Secretary's Task Force on Black and Minority Health.

Looker, A.C., Johnson, C.L. & McDowell, M.A., et al. (1989). Iron status: prevalence of impairment in three Hispanic groups in the United States. <u>American Journal of Clinical Nutrition</u>, 49, 553-558.

McGinnis, J.M., Ballard-Barbash, R.M. (1991 June). Obesity in minority populations: policy implications of research. American Journal of Clinical Nutrition, 53(6 Suppl). 1512S-1514S.

Morbidity and Mortality Weekly Report (1990). Prevalence of overweight for Hispanics– United States, 1982-1984. <u>Journal of the American Medical Association, 263(5)</u>, 631-632.

Murphy, S.P., Castillo, R.O. & Martorell, R., et al. (1990). An evaluation of food group intakes by Mexican American children. <u>Journal of the American Dietetic Association</u>, 90(3), 388-392.

Newell, G.R., Borrud, L.G. & McPherson, R.S., et al. (1988). Nutrient intakes of Whites, blacks and Mexican Americans in southeast Texas. <u>Preventive Medicine</u>, 17(5), 622-633.

Pawson, I.G., Martorell, R. & Mendoza, F.E. (1991). Prevalence of overweight and obesity in U.S. Hispanic populations. <u>American Journal of Clinical Nutrition</u>, 53 (Suppl 6): 1522S-1528S.

Stern, M.P., Gaskill, S.P. & Hazuda, H.P., et al. (1983). Does obesity explain excess prevalence of diabetes among Mexican Americans? Results of the San Antonio Heart Study. <u>Diabetologia</u>, 24(4), 272-277.

Vega, W.A., Sallis, J.F. & Patterson, T.L., et al. (1988). predictors of dietary change in Mexican American families participating in a health behavior change program. American Journal of Preventive Medicine, 4(4), 194-199.

Nutrition

Diehl, A.K. & Stern, M.P. (1989). Special health problems of Mexican Americans: Obesity, gallbladder disease, diabetes mellitus, and cardiovascular disease. <u>Advances in Internal Medicine</u>, 34, 73-96.

Espino, D.V., Burge, S.K. & Moreno, C.A. (1991). The prevalence of selected chronic diseases among the Mexican American elderly: data from the 1982-1984 Hispanic Health and Nutrition Examination Survey. <u>Journal of the American Board of Family Practice</u>, 4: 217-222.

Forman, M.R., Trowbridge, F.L. & Gentry, E.M. et al. (1986). Overweight adults in the United States: the behavior risk factor surveys. <u>The American Journal of Clinical Nutrition</u>, 44, 410-416.

Kumanyika, S. & Helitzer, D.L. Nutritional Status and Dietary Pattern for Racial Minorities in the United States. <u>Report of the Secretary's Task Force on Black and Minority Health.</u>

Looker, A.C., Johnson, C.L. & McDowell, M.A., et al. (1989). Iron status: prevalence of impairment in three Hispanic groups in the United States. <u>American Journal of Clinical Nutrition</u>, 49, 553-558.

McGinnis, J.M., Ballard-Barbash, R.M. (1991 June). Obesity in minority populations: policy implications of research. American Journal of Clinical Nutrition, 53(6 Suppl). 1512S-1514S.

Morbidity and Mortality Weekly Report (1990). Prevalence of overweight for Hispanics—United States, 1982-1984. <u>Journal of the American Medical Association, 263(5)</u>, 631-632

Murphy, S.P., Castillo, R.O. & Martorell, R., et al. (1990). An evaluation of food group intakes by Mexican American children. <u>Journal of the American Dietetic Association</u>, 90(3), 388-392.

Newell, G.R., Borrud, L.G. & McPherson, R.S., et al. (1988). Nutrient intakes of Whites, Blacks and Mexican Americans in southeast Texas. <u>Preventive Medicine</u>, 17(5), 622-633.

Sanjur, Diva (1995). <u>Hispanic Foodways, Nutrition & Health.</u> Needham Heights, Massachusetts: Allyn & Bacon.

Stern, M.P., Gaskill, S.P. & Hazuda, H.P., et al. (1983). Does obesity explain excess prevalence of diabetes among Mexican Americans? Results of the San Antonio Heart Study. <u>Diabetologia</u>, <u>24(4)</u>, 272-277.

Vega, W.A., Sallis, J.F. & Patterson, T.L., et al. (1988). Predictors of dietary change in Mexican American families participating in a health behavior change program. <u>American Journal of Preventive Medicine</u>, 4(4), 194-199.

Results of Hispanic Health and Nutrition Survey (HHANES)

Aguirre-Molina, M., Ramirez, A. & Ramirez, M. (1993). Health promotion and prevention strategies. <u>Public Health Reports</u>, 108(5).

Council on Scientific Affairs. 1991. Hispanic health in the United States. <u>Journal of the American Medical Association</u>, (265), 248-252.

Hispanic Health & Nutrition Examination Survey, 1982-1984. Findings in health status and health care needs. <u>American Journal of Public Health</u>, 80(Supplement). 1990.

Office of Minority Health (1990) <u>Closing the Gap. Health & Minorities in the U.S.</u> Washington, D.C.: U.S. Government Army Office Department of Health and Health Services.

Diabetes Mellitus

Mitchell, B.D., Haffner, S.M., Hazuda, H.P., Patterson, J.K. & Stern, M.P., (1992). Diabetes and coronary heart disease risk in Mexican Americans. <u>Annals of Epidemiology</u>, 2: 101-106.

Diehl, A.K. & Stern, M.P. (1989). Special health problems of Mexican Americans: Obesity, gallbladder disease, diabetes mellitus, and cardiovascular disease. <u>Advances in Internal Medicine</u>, 34, 73-96.

Hamman, R.F., Mayer, E.J. & Moo-Young, G.A., et al. (1989). Prevalence and risk factors of diabetic retinopathy in non-Hispanic Whites and Hispanics with NIDDM. <u>Diabetes</u>, 38, 231-237.

Hanis, C.L., Hewett-Emmett, D., Bertin, T.K. & Schull, W.J. (1991). Origins of U.S. Hispanics. Implications for Diabetes. <u>Diabetes Care</u>, 14 (Supplement 3) 618-627.

Hendricks, R.T., Hass, L.B. (1991 September). Diabetes in minority populations. <u>Nurse Practice Forum</u>, 2(3), 199-202.

Hollingsworth, D.R., Vaucher, Y. & Yamamoto, T.R. (1991). Diabetes in pregnancy in Mexican Americans. <u>Diabetes Care, 14 (Suppl 3)</u>, 695-705.

Stern, M.P., Gaskill, S.P. & Hazuda, H.P., et al. (1983). Does obesity explain excess prevalence of diabetes among Mexican Americans? Results of the San Antonio Heart Study. <u>Diabetologia</u>, 24(4), 272-277.

Stern, M.P., Rosenthal, M. & Haffner, S.M., et al. (1984). Sex differences in the effects of sociocultural status on diabetes and cardiovascular risk factors in Mexican Americans. American Journal of Epidemiology, 120(6), 834-851.

Gallbladder Disease

Diehl, A.K., Haffner, S.M. & Knapp, J.A., et al. (1989). Dietary intake and the prevalence of gallbladder disease in Mexican Americans. Gastroenterology, 97, 1527-1533.

Diehl, A.K. & Stern, M.P. (1989). Special health problems of Mexican Americans: Obesity, gallbladder disease, diabetes mellitus, and cardiovascular disease. <u>Advances in Internal Medicine</u>, 34, 73-96.

Haffner, S.M., Diehl, A.K. & Stern, M.P., et al. (1989). Central Adiposity and gallbladder disease in Mexican Americans. <u>American Journal of Epidemiology</u>, 129(3), 587-595.

Maurer, K.R., Everhart, J.E. & Ezzati, T.M., et al. (1989). Prevalence of gallstone disease in Hispanic populations in the United States. <u>Gastroenterology</u>, 96, 487-492.

End State Renal Disease

Cruz, I.A., Hosten, A.O. (1991 April). ESRD in minorities (editorial). <u>Journal of National Medical Association</u>, 83(4), 309-312.

Feldman, H.I., Klag, M.J., et al. (1992 May). End stage renal disease in U.S. minority groups. <u>American Journal of Kidney Disease 19(5)</u>, 397-413.

Ferguson, R., Morrisey, E. (1993 August). Risk factors for end state renal disease among minorities. <u>Transplant Proc. 25(4)</u>, 2415-2420.

Pugh, J.A., Stern, M.P. & Haffner, S.M., et al. (1988). Excess incidence of treatment of end state renal disease in Mexican Americans. <u>American Journal of Epidemiology</u>, 127(1), 135-144.

Coronary Heart Disease

Castro, F.G. & Baezconde-Garbanati, L. (1988). Cardiovascular disease in Hispanics: A bio-behavioral perspective. Washington, D.C.: COSSMHO, The National Coalition of Hispanic Health and Human Services Organizations.

Diehl, A.K. & Stern, M.P. (1989). Special health problems of Mexican Americans: Obesity, gallbladder disease, diabetes mellitus, and cardiovascular disease. <u>Advances in Internal Medicine</u>, 34, 73-96.

Friis, R., Nanjundappa, G. & Prendergast, T.J., et al. (1981). Coronary heart disease mortality and risk among Hispanics and Non-Hispanics in Orange County, California. Public Health Reports, 96, 418-422.

Hazuda, H.P., Stern, M.P., & Gaskill, S.P., et al. (1983). Ethnic differences in health knowledge and behaviors related to the prevention and treatment of coronary heart disease. <u>American Journal of Epidemiology</u>, 117(6), 717-728.

Kato, M., Soto, R., Goldberg, R.B. & Sosenko, J.M. (1991). Comparison of lipid profiles of Cubans and other Hispanics with Non-Hispanics. <u>Archives of Internal Medicine</u>, 151, 1613-1616.

Mitchell, B.D., Stern, M.P. & Haffner, S.M., et al. (1990). Risk factors for cardiovascular mortality in Mexican Americans and Non-Hispanic Whites. <u>American Journal of Epidemiology</u>, 131(3), 423-433.

Savage, P.J. & Harlan, W.R. (1991 Spring). Racial and ethnic diversity in obesity and other risk factors for cardiovascular disease: Implications for studies and treatment. Ethnic Diseases, 1(2), 200-211.

Stern, M.P. (1985). Epidemiology of diabetes and coronary heart disease among Mexican Americans. <u>Association of Life Insurance Medical Directors of America</u>, 67, 79-89.

Hypertension

Barrios, E., Lier, E. & Mulloy, K., et al. (1987). Hypertension in the Hispanic and Black population in New York City. <u>Journal of the National Medical Association</u>. 79(7), 749-752.

Cangiano, J.L. (1994). Hypertension in Hispanic Americans. <u>Cleveland Clinic Journal</u> of Medicine (61), 345-350.

Francis, C.K. (1991 July). Hypertension, cardiac disease, and compliance in minority patients. <u>American Journal of Medicine</u>, 91(1A), 29S-36S.

Francis, C.K. (1990 March 12). Hypertension and cardiac diseases in minorities. American Journal of Medicine, 88(313), 3S-8S.

Haywood, L.J. (1990 March 12). Hypertension in minority populations. Access to care. American Journal of Medicine 88(3B). 17S-20S.

Kumanyika, S., Savage, D.D. & Ramirez, A.G., et al. (1989). Beliefs about high blood pressure prevention in a survey of Blacks and Hispanics. <u>American Journal of Preventive Medicine</u>, 5(1), 21-26.

Cancer

Giuliano, A., Alberts, D. (1994). Cancer prevention among U.S. Hispanics. <u>Archives of Internal Medicine</u>, 154, 1057-1058.

Harlan, L.C., Berstein, A.B. & Kessler, L.G. (1991). Cervical cancer screening: Who is not screened and why? <u>American Journal of Public Health</u>, 81: 885-890.

Mahoney, M.C. (1992 April). Cervical cancer control in minority women [more needs to be done- editorial comment]. Western Journal of Medicine, 156(4), 376-379.

Morris, D.L., Lucero, G.T. & Joyunce, E.V. et al. (1989). Cervical cancer, a major killer of Hispanic women: Implications for health education. <u>Health Education</u>, 20(5), 23-28.

Newell, G.R., & Mills, P.K. (1987). Low cancer rates in Hispanic women related to social and economic factors. <u>Women's Health, 11(3-4)</u>, 23-35.

Perez-Stable, E.J., Sabogal, F., Otero-Sabogal, R., Hiatt, R.A. & McPhee, S.J. (1992). Misconceptions about cancer among Latinos and Anglos. <u>Journal of the American Medical Association</u>, 268: 3219-3223.

Peters, R.K., Thomas, D. & Hagain, D.G., et al. (1986). Risk factors for invasive cervical cancer among Latinas and Non-Latinas in Los Angeles County. <u>Journal of the National Cancer Institute</u>, 77(5), 1063-1077.

Samet, J.M., Hunt, W.C. & Lerchen, M.L., et al. (1988). Delay in seeking care for cancer symptoms: A population-based study of elderly New Mexicans. <u>Journal of the National Cancer Institute</u>, 80(6), 432-438.

Stein, J.A., & Fox, S.A. (1990). Language reference as an indicator of mammography use among Hispanic Women. <u>Journal of the National Cancer Institute</u>, 82: 1715-1716.

Villar, H.V. & Menck, H.R. (1994). The National Cancer Data Base report on cancer in Hispanics. Relationships between ethnicity, poverty and the diagnosis of some cancers. <u>Cancer</u>, 74: 2386-2395.

Warshauer, M.D., Silverman, D.T. & Schottenfeld, D., et al. (1986), Stomach and colorectal cancers in Puerto Rican-born residents of New York City. <u>Journal of the National Cancer Institute</u>, 76(4), 591-595.

Infectious Diseases

(1988 June 15). <u>Tuberculosis: Still an important problem among minorities</u>. Center for Disease Control Report.

Perez-Sable, E.J., Slutkin, G. (1986). Tuberculin reactivity in the United States and foreign-born Latinos. <u>American Journal of Public Health.</u> 76(5).

Snider, D.E., Salinas, L. & Kelly, G.D. (1989). Tuberculosis: An increasing problem among minorities in the United States. <u>Public Health Reports</u>, 104(6), 646-653.

Sumaya, C.V. (1991 August). Major infectious diseases causing excess morbidity in the Hispanic population. <u>Arch Int Med, 151(8)</u>, 1513-1520.

Wallace, C.E., Kelley, M.F. & Bybee, J.A. (1991 October). Controlling tuberculosis in minority populations in Texas. <u>Tex Med, 87(10)</u>, 130-131.

AIDS

Flaskerud, J.H. & Nyamathi, A.M. (1989). Black and Latina women's AIDS related knowledge, attitudes, and practices. Research in Nursing and Health, 12, 339-346.

Gayle, J.A., Selik, R.M. (1990 July). Surveillance for AIDS and HIV infection among Black and Hispanic children and women of childbearing age, 1981-1989. MMWR CDC Surveillance Summation, 39(3), 23-30.

Hahn, R.A., Onorato, I.M. & Jones, T.S., et al. (1989). Prevalence of HIV infection among intravenous drug users in the United States. <u>Journal of the American Medical Association</u>, 261(18), 2677-2684.

Norris, A.Z., Ford, K. (1991 November-December). AIDS risk behaviors of minority youth living in Detroit. <u>American Journal of Preventive Medicine</u> 7(6), 416-421.

Rotheram-Borus, M.J., Koopman, C. (1991 Winter). Sexual risk behavior, AIDS knowledge, and beliefs about AIDS among predominantly minority gay and bisexual male adolescents. <u>AIDS Education Prevention</u>, 3(4), 305-312.

Selik, R.M., Castro, K.G. & Pappaioanou, M. (1988). Racial/ethnic differences in the risk of AIDS in the United States. <u>American Journal of Public Health, 78(12)</u>, 1539-1545.

Puerto Rican Health Care Issues

(1991). Department of Health, Office of Health Care Statistics, Puerto Rico.

(4 June 1983). El impacto medico y fisico del SIDA. Enrique Vazques Quintana, Secretary of Health, Puerto Rico.

(1982). Department of Health, Puerto Rico.

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