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Equipment

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- E. Topaz, 9150 Topaz Way, San Diego, CA 92123.
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Childbearing Characteristics of U.S.- and Foreign-Born Hispanic Mothers

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Synopsis

This study compares maternal and infant health and sociodemographic characteristics of U.S.-born and foreign- or Puerto Rican-born Hispanic mothers and their babies, using data from the national vital statistics system and the 1980 National Natality Survey. While nearly half of all Hispanic mothers and Mexican and Puerto Rican mothers were

born in the United States, less than 10 percent of Cuban and other Hispanic mothers were U.S. born.

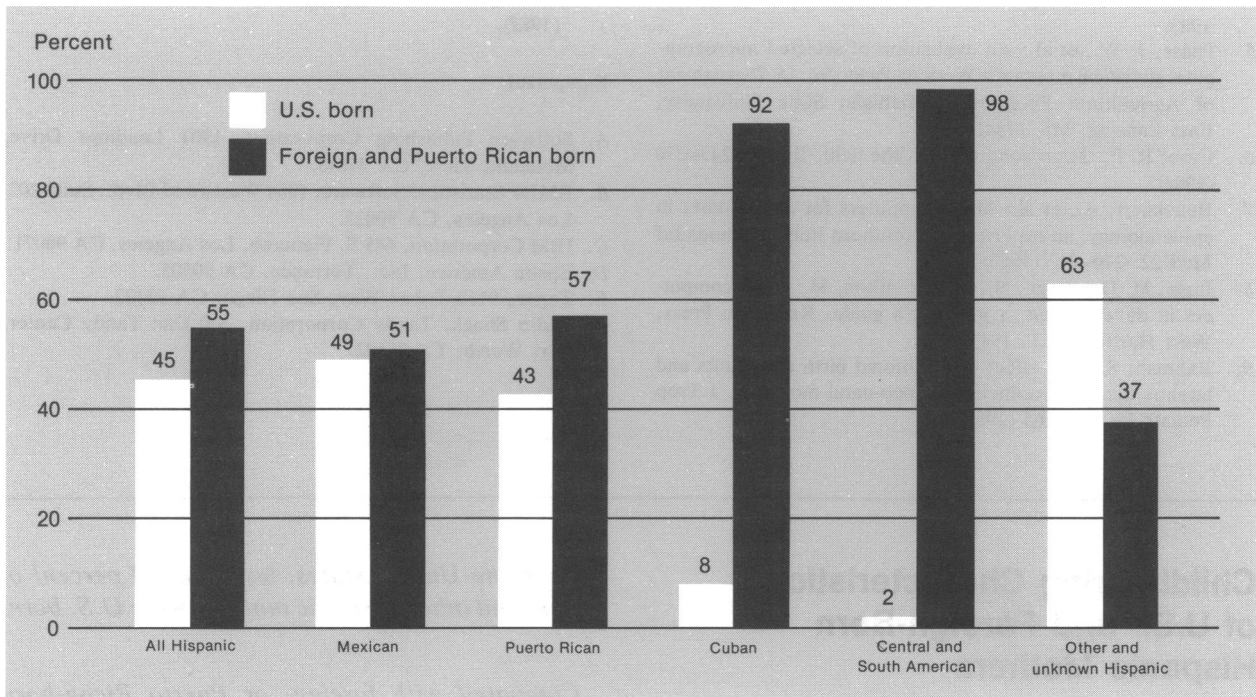
Compared with foreign- or Puerto Rican-born Hispanic mothers, U.S.-born mothers tended to be younger, to have had fewer high-order births, to be less likely to receive delayed or no prenatal care, to have higher educational attainment, and to be more likely to be unmarried.

The incidence of low birth weight among infants born to Hispanic mothers, particularly Mexican and Cuban women, was relatively low. When the proportions of low birth weight were examined by nativity status, infants born to foreign- or Puerto Rican-born women were consistently less likely to be of low birth weight. In an effort to account for these findings, the mother's smoking status before and during pregnancy is examined. Compared with non-Hispanic mothers, Hispanic mothers were much less likely to have smoked before or during pregnancy. These data are examined to see if they account for the better outcome as measured by birth weight for Hispanic births, especially those to foreign- or Puerto Rican-born women.

TO EXAMINE DIFFERENCES IN CHILDBEARING characteristics among U.S.-born and foreign- or Puerto Rican-born Hispanic mothers in the United States, birth statistics for 1981 compiled by the Na-

tional Center for Health Statistics (NCHS) and unpublished data from the 1980 National Natality Survey were used. Characteristics under study include the proportions of teenage mothers, higher order

Percent of Hispanic mothers who are U.S. or foreign and Puerto Rican born



births, and unmarried mothers; the years of education; low birth weight; and initiation of prenatal care.

Sources and Methods

Twenty-two States accounting for 95 percent of all U.S. Hispanic births reported the Hispanic origin of the parents on birth certificates in 1981. Data were available for five specific Hispanic-origin groups—Mexican, Puerto Rican, Cuban, Central and South American, and other and unknown Hispanic. More than two-thirds of the 321,954 births of Hispanic origin were to Mexican mothers. Although Mexican mothers were about equally divided between the U.S. born and foreign born, Puerto Rican, Cuban, and Central and South American mothers were more likely to have been born outside the United States (see figure). The term foreign born in this article includes women born in Puerto Rico and countries outside the United States.

Results and Discussion

Maternal age and birth order. Teenage childbearing was much more prevalent among U.S.-born than among foreign-born Hispanic mothers, regardless of specific origin (table 1). Levels of teenage childbearing among U.S.-born Hispanic women were similar to those for black non-Hispanic women, while the level of teenage childbearing for foreign-born Hispanic women was only slightly higher than that for

white non-Hispanic women. Overall, one-quarter of all births to U.S.-born Hispanic mothers were to women under 20 years in 1981, compared with 14 percent of births to foreign-born Hispanic women. These proportions are similar for Mexican and Cuban women. The differential by nativity was even greater, however, for Puerto Rican and other Hispanic women. For example, among Puerto Rican mothers, nearly one-third of the U.S.-born were teenagers, compared with 17 percent of those born in Puerto Rico.

Childbearing by women age 30 and older was much more common among foreign-born than among U.S.-born Hispanic women—25 percent compared with 15 percent. This pattern is observed for each Hispanic origin group, and it is no doubt associated with the greater incidence of large families among the foreign-born Hispanic population. For example, 19 percent of births to foreign-born Hispanic women were fourth and higher order in 1981 compared with 14 percent of births to their U.S.-born counterparts.

Prenatal care. Compared with foreign-born Hispanic women, U.S.-born Hispanic women were generally more likely to have begun their prenatal care in the first trimester. The differences, however, were not substantial, and, for some groups, the pattern was reversed. For example, 64 percent of U.S.-born Mexican women compared with 56 per-

Table 1. Selected characteristics of mothers by Hispanic origin and nativity status of mother and by race for mothers of non-Hispanic origin, 22 reporting States, 1981

Selected characteristics	All origins ^{1,2}	Hispanic						Non-Hispanic ²		
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total ³	White	Black
<i>Age of mother</i>										
Percent under 20 years	14.8	...	...	...	...	...	...	14.2	11.8	25.5
U.S. born .....	...	24.6	24.2	31.8	26.7	20.1	21.5	...	...	...
Foreign or Puerto Rican born .....	...	13.5	14.7	16.6	11.7	7.9	9.0	...	...	...
Percent 20-29 years	63.9	...	...	...	...	...	...	64.5	66.3	58.8
U.S. born .....	...	60.5	59.7	62.4	60.9	60.9	63.1	...	...	...
Foreign or Puerto Rican born .....	...	61.7	62.3	55.7	65.4	63.2	60.4	...	...	...
Percent 30 years and over	21.3	...	...	...	...	...	...	21.3	21.9	15.7
U.S. born .....	...	15.0	16.1	5.8	12.4	18.9	15.4	...	...	...
Foreign or Puerto Rican born .....	...	24.8	23.0	27.7	22.9	28.9	30.6	...	...	...
<i>Birth order</i>										
Percent 4th and higher order birth	10.4	...	...	...	...	...	...	9.4	7.9	14.7
U.S. born .....	...	13.7	15.4	6.1	3.9	6.3	10.5	...	...	...
Foreign or Puerto Rican born .....	...	19.2	22.6	18.6	5.1	10.7	14.1	...	...	...
<i>Prenatal care</i>										
Percent starting 1st trimester	74.8	...	...	...	...	...	...	77.3	81.5	61.5
U.S. born .....	...	63.3	64.1	52.9	79.1	68.4	66.1	...	...	...
Foreign or Puerto Rican born .....	...	58.3	56.3	55.1	80.2	58.0	68.2	...	...	...
Percent late or no care	5.9	...	...	...	...	...	...	4.9	3.6	9.9
U.S. born .....	...	10.0	9.4	16.6	4.3	9.9	8.5	...	...	...
Foreign or Puerto Rican born .....	...	12.8	13.6	15.3	4.1	12.4	8.0	...	...	...
<i>Marital status</i>										
Percent of unmarried mothers	19.7	...	...	...	...	...	...	18.9	9.8	57.1
U.S. born .....	...	26.8	23.5	50.6	19.8	25.4	27.7	...	...	...
Foreign or Puerto Rican born .....	...	22.5	18.1	46.0	13.9	29.1	20.3	...	...	...
<i>Educational attainment⁴</i>										
Percent completing less than 9 years ...	4.6	...	...	...	...	...	...	3.1	2.4	4.9
U.S. born .....	...	8.3	11.1	7.9	3.9	6.7	5.1	...	...	...
Foreign or Puerto Rican born .....	...	30.8	65.5	20.6	9.8	21.1	29.8	...	...	...
Percent completing 12 years of school or more	76.5	...	...	...	...	...	...	78.8	82.8	63.8
U.S. born .....	...	55.7	54.9	48.9	73.8	69.9	63.7	...	...	...
Foreign or Puerto Rican born .....	...	46.6	19.3	43.3	73.3	60.1	52.1	...	...	...

¹ Includes origin not stated.

² Data on prenatal care based on a 20 percent sample of births.

³ Includes races other than white and black.

⁴ Excludes data for California and Texas, which did not require reporting of educational attainment of mother.

SOURCE: Unpublished data, Natality Statistics Branch, Division of Vital Statistics, National Center for Health Statistics.

cent of their foreign-born counterparts began to receive prenatal care in the first trimester, but mothers born in Puerto Rico and Cuban foreign-born mothers were more likely than U.S.-born mothers to start care early. In receipt of early prenatal care, Hispanic women, except Cubans, were more similar to black than white non-Hispanic mothers.

Maternal education and marital status. The proportion of Hispanic mothers with relatively low educational attainment as well as the proportion with at least a high school diploma were closely associated with the mother's nativity status. That is, foreign-born Hispanic women were much more likely than U.S.-born women to have completed fewer than 9

years of schooling (31 percent compared with 8 percent) as well as less likely to be high school graduates (47 percent compared with 56 percent). Educational attainment of U.S.-born Hispanic women approached that of black non-Hispanic women. Only Cuban women, both U.S. and foreign born, have levels of education comparable to those of non-Hispanic women.

U.S.-born Hispanic mothers were slightly more likely than their foreign-born counterparts to have been unmarried at the time of childbirth, 27 percent compared with 23 percent. There were, however, wide variations among Hispanic-origin groups. The highest proportions of unmarried women were observed for Puerto Rican mothers, 51 percent for

Table 2. Observed and adjusted proportions of fourth and higher order births and of unmarried mothers, by nativity status of mothers of Hispanic origin and by race for mothers of non-Hispanic origin, 22 reporting States, 1981

Characteristics and nativity status of mother	Hispanic						Non-Hispanic		
	Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and Unknown Hispanic	Total ¹	White	Black
Percent 4th and higher order birth	...	...	...	...	...	...	9.4	7.9	14.7
U.S. born	13.7	15.4	6.1	3.9	6.3	10.5	...	...	...
Foreign or Puerto Rican born:									
Observed	19.2	22.6	18.6	5.1	10.7	14.1	...	...	...
Adjusted ²	14.8	18.5	11.8	3.5	8.3	9.9	...	...	...
Percent unmarried	...	...	...	...	...	...	18.9	9.8	57.1
U.S. born	26.8	23.5	50.6	19.8	25.4	27.7	...	...	...
Foreign or Puerto Rican born:									
Observed	22.5	18.1	46.0	13.9	29.1	20.3	...	...	...
Adjusted ²	24.8	19.7	51.2	16.8	32.6	23.5	...	...	...

¹ Includes races other than white and black.

² Standardized by the direct method on the basis of the age distribution of the U.S. born mothers.

SOURCE: Unpublished data, Natality Statistics Branch, Division of Vital Statistics, National Center for Health Statistics.

Table 3. Selected characteristics of births by Hispanic origin and nativity status of mother and by race for mothers of non-Hispanic origin, 22 reporting States, 1981

Selected characteristics	All origins ^{1,2}	Hispanic						Non-Hispanic		
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and Unknown Hispanic	Totals ³	White	Black
Percent low birth weight	6.9	...	...	...	...	...	...	7.0	5.7	12.7
U.S. born	...	6.8	6.3	9.6	6.6	7.7	7.9	...	...	...
Foreign or Puerto Rican born	...	5.5	5.0	8.6	5.8	5.7	5.4	...	...	...
Percent gestation less than 37 weeks	9.6	...	...	...	...	...	...	9.4	7.5	16.9
U.S. born	...	11.3	11.2	13.2	10.8	8.6	10.2	...	...	...
Foreign or Puerto Rican born	...	10.3	10.2	12.4	8.4	9.8	9.5	...	...	...
Percent 1-minute Apgar score less than 7 ⁴	9.5	...	...	...	...	...	...	9.5	9.0	11.7
U.S. born	...	9.7	10.1	7.4	8.7	7.3	11.2	...	...	...
Foreign or Puerto Rican born	...	8.0	8.9	7.9	6.8	7.8	7.5	...	...	...
Percent 5-minute Apgar score less than 7 ⁴	2.1	...	...	...	...	...	...	2.1	1.8	3.4
U.S. born	...	1.9	2.0	1.9	2.5	2.1	1.9	...	...	...
Foreign or Puerto Rican born	...	1.6	1.8	1.9	1.4	1.4	1.5	...	...	...

¹ Includes origin not stated.

² Based on a 20 percent sample of births.

³ Includes races other than white and black.

⁴ Excludes data for California and Texas, which did not require reporting of Apgar scores.

⁵ SOURCE: Unpublished data, Natality Statistics Branch, Division of Vital Statistics, National Center for Health Statistics.

U.S.-born and 46 percent for Puerto Rican-born. The lowest levels were for Cuban mothers, 20 percent for U.S.-born and 14 percent for foreign-born women.

Effects of age distribution. In evaluating the proportions of high-order births and of unmarried mothers for U.S.- and foreign-born Hispanic women, it is important to remember the wide differences in the

age distributions of Hispanic mothers giving birth in 1981. The much older age composition of the foreign-born Hispanic mothers tends to increase the levels of higher order births on the one hand and to reduce the levels of nonmarital births on the other. When these proportions for the foreign-born Hispanic women are adjusted on the basis of the age composition of the U.S.-born mothers, the differentials by nativity are considerably reduced (table 2).

Table 4. Percent low birth weight for characteristics of mothers of Hispanic origin, by nativity status of mother by race for mothers of non-Hispanic origin, 22 reporting States, 1981

Selected characteristics	All origins ^{1,2}	Hispanic						Non-Hispanic ²		
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total ³	White	Black
<i>Age of mother</i>										
Under 20 years	9.4	...	...	...	...	...	...	9.9	7.8	14.0
U.S. born .....	...	7.8	7.1	9.8	10.1	8.8	9.5	...	...	...
Foreign or Puerto Rican born .....	...	7.1	6.5	10.2	8.7	6.9	7.1	...	...	...
20–29 years	6.5	...	...	...	...	...	...	6.6	5.4	12.4
U.S. born .....	...	6.5	5.9	9.7	4.9	7.4	7.5	...	...	...
Foreign or Puerto Rican born .....	...	5.2	4.7	8.1	5.3	5.6	5.3	...	...	...
30 years and over	6.2	...	...	...	...	...	...	6.3	5.4	11.7
U.S. born .....	...	6.6	6.4	6.9	7.6	7.3	7.4	...	...	...
Foreign or Puerto Rican born .....	...	5.4	4.8	8.7	5.6	5.5	5.2	...	...	...
<i>Prenatal care</i>										
First trimester	6.1	...	...	...	...	...	...	6.2	5.2	11.7
U.S. born .....	...	6.2	5.9	8.2	5.5	6.2	6.6	...	...	...
Foreign or Puerto Rican born .....	...	5.4	4.9	8.0	5.2	5.7	5.3	...	...	...
Late or no care	11.2	...	...	...	...	...	...	12.5	9.9	17.2
U.S. born .....	...	9.1	7.9	13.0	22.2	18.4	10.7	...	...	...
Foreign or Puerto Rican born .....	...	7.1	6.1	12.1	12.7	6.7	7.3	...	...	...
<i>Marital status</i>										
Unmarried mothers	11.5	...	...	...	...	...	...	12.4	9.6	14.6
U.S. born .....	...	9.0	8.0	11.3	11.9	12.4	10.6	...	...	...
Foreign or Puerto Rican born .....	...	7.2	6.0	10.2	10.6	6.8	6.9	...	...	...
<i>Educational attainment⁴</i>										
Less than 9 years	9.0	...	...	...	...	0	...	10.4	8.6	14.5
U.S. born .....	...	9.2	8.1	11.9	14.3	...	7.5	...	...	...
Foreign or Puerto Rican born .....	...	6.4	5.3	9.9	7.2	5.5	6.3	...	...	...
12 years of school or more	6.2	...	...	...	...	...	...	6.1	5.1	11.3
U.S. born .....	...	6.7	5.5	8.2	4.3	6.4	7.0	...	...	...
Foreign or Puerto Rican born .....	...	5.9	5.5	7.5	5.3	5.5	5.1	...	...	...

¹ Includes origin not stated.

² Based on a 20 percent sample of births.

³ Includes races other than white and black.

⁴ Excludes data for California and Texas which did not require reporting of educational attainment.

SOURCE: Unpublished data, Natality Statistics Branch, Division of Vital Statistics, National Center for Health Statistics.

Low birth weight. The most objective measure of pregnancy outcome is the infant's birth weight. It has been observed elsewhere that births to Hispanic, especially Mexican, women are generally at lower risk of low birth weight (1). In 1981, 6.1 percent of all infants born to Hispanic mothers weighed less than 2,500 grams (5 1/2 pounds), compared with 5.7 percent of white non-Hispanic and 12.7 percent of black non-Hispanic births. Infants born to Mexican mothers had particularly low levels of low birth weight, with births to foreign-born Mexican women showing the most favorable levels of all, just 5.0 percent compared with 6.3 percent of births to their U.S.-born counterparts (table 3). Infants born to foreign-born mothers of other Hispanic-origin groups were at similarly lower risk of low birth weight than those born to their U.S.-born counterparts. When the figures for percent of low birth weight infants were further examined according to

characteristics of the mother known to be associated with low birth weight, a very clear and generally consistent pattern emerged. Low birth weight levels were more favorable for infants born to foreign-born than to U.S.-born Hispanic women, regardless of age, when prenatal care began, whether the mother was unmarried, or her educational attainment (table 4).

It is difficult to account for the highly advantageous position of Mexican-origin infants with respect to low birth weight. Some persons have speculated that Mexican families put a high priority on proper nutrition for pregnant women; this would help mitigate their otherwise less favorable socioeconomic status. Unpublished data from NCHS's 1980 National Natality Survey show also that Mexican women are far less likely to have smoked during pregnancy than white non-Hispanic women, 10 percent compared with 27 percent. Further, foreign-

born Mexican women were less likely to be smokers than are their U.S.-born counterparts.

Other measures of outcome for Hispanic-origin births by nativity of mother were generally consistent with the findings for low birth weight (table 3). That is, births to foreign-born Hispanic women were less likely than births to U.S.-born Hispanic women to have been preterm (less than 37 weeks of gestation) or the infants to have had low 1- and 5-minute Apgar scores.

Summary. It has long been recognized that it is not appropriate to consider the Hispanic population as a single monolithic ethnic group, and that there are

substantial differences among the Mexican, Puerto Rican, Cuban, and other Hispanic populations. It is further evident from the data presented here that the mother's nativity is an additional differentiating factor, affecting a variety of socioeconomic and demographic characteristics of the mother as well as the outcome of her pregnancy.

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Meeting the 1990 Hypertension Objectives for the Nation —a Progress Report

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Synopsis

The National High Blood Pressure Education Program (NHBPEP) effort got underway in 1972 following hypertension research findings and continues to be influenced and, when necessary, redirected, by further findings. Its coordinating committee is composed of representatives from 32 national organizations, and the program itself includes several Federal agencies, all State health departments, and more than 2,000 community-based programs.

The goals of NHBPEP and the 1990 prevention objectives for the nation center around the same basic theme: high blood pressure is a serious condition leading to major diseases and premature death. It can be easily detected and effectively brought under control.

In the summer of 1984, Admire and co-workers provided a general review and status report of the 1990 Hypertension Objectives and the progress made in meeting those objectives. In the remarkably short period of time since that review, there is even more progress to report.

There is good evidence of progress in preventing disease and premature death from hypertension, in bringing hypertension under long term control, and in giving Americans a better understanding of the consequences of uncontrolled high blood pressure. There is also evidence in the fact that while visits to physicians generally have increased only slightly, hypertension visits have increased more markedly. And there is evidence that stroke mortality continues to decline in an almost linear fashion.

WHEN THE NATIONAL HIGH BLOOD PRESSURE Education Program (NHBPEP) effort began in 1972, there were many gaps in public and professional understanding of high blood pressure. A national consumer food survey conducted in 1982 by the Food and Drug Administration and the National Heart, Lung, and Blood Institute regarding the public's knowledge of high blood pressure provides an opportunity to compare changes from similar surveys conducted in 1973 (1) and 1974 (2). Table 1 shows that in 1973 less than one-fourth of

respondents knew that "hypertension" was the same as "high blood pressure," while in 1982, more than one-half knew it. More than a decade ago, a large portion of the public believed that "hypertension" was the same as "nervous tension" and many hypertensives were taking blood pressure medication only when they were tense or emotionally upset. Compliance with a medical regimen was inadequate and convincing hypertensives to remain on therapy was difficult—as it is today.