

PRC Working Paper Series
2004-2005

No. 04-05-12

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* Paper presented at the 2005 annual meeting of the Population Association of America, Philadelphia, PA. The authors are grateful to Starling Pullum for computing assistance and to Kelly Mikelson and Melissa Radey for their helpful comments. This research was supported by the following grants: 1R01-HD-043371-01 from the National Institute of Child Health and Human Development, 5R01-HD-35301 from the National Institute of Child Health and Human Development, 5P30HD32030 from the National Institute of Child Health and Human Development, and by funding provided by: California HealthCare Foundation, The Center for Research on Religion and Urban Civil Society at the University of Pennsylvania Commonwealth Fund, Ford Foundation, Foundation for Child Development, Fund for New Jersey, William T. Grant Foundation, Healthcare Foundation of New Jersey, William and Flora Hewlett Foundation, Hogg Foundation, Christian A. Johnson Endeavor Foundation, Kronkosky Charitable Foundation, Leon Lowenstein Foundation, John D. and Catherine T. MacArthur Foundation, A.L. Mailman Family Foundation, Charles Stewart Mott Foundation, National Science Foundation, David and Lucile Packard Foundation, Public Policy Institute of California, Robert Wood Johnson Foundation, St. David's Hospital Foundation, St. Vincent Hospital and Health Services, and the US Department of Health and Human Services (ASPE and ACF). Please contact Robert A. Hummer at rhummer@prc.utexas.edu

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Abstract

Objectives. Research has extensively documented favorable birth outcomes in the Mexican American population despite low socioeconomic status and poor prenatal care. Little is known, however, about Mexican American children born to unmarried parents, despite comprising over 40 percent of all births in this population. We conduct a comparative analysis of Mexican American children and children in other major race/ethnic groups at age three to investigate whether Mexican Origin children maintain their initial health advantage in their early years.

Methods. We use data from the nationally-based Fragile Families Survey and regression analyses to address our aims. *Results.* Findings show that compared to non-Hispanic white children, Mexican Origin children have higher levels of poor health and overweight/obesity. At the same time, they have lower rates of health insurance and fewer doctor visits. The greatest health care disadvantages are found among children of Mexican immigrants. *Conclusions.* Among unmarried families, the early health advantage of Mexican Origin children at birth runs the risk of being compromised by the time they reach age three as a result of poor access to health care and disadvantaged socioeconomic characteristics. Greater health insurance coverage for Mexican American children and, in particular, children of immigrants is needed.

Health Status and Health Care among Mexican American Children Born to Unmarried Women

Introduction

In spite of the relatively favorable birth outcomes among Mexican Americans in comparison to other racial and ethnic groups (Frisbie, Forbes and Hummer, 1998; Reichman and Kenny, 1998; Ventura et al., 2001: Table 25), a small but growing body of evidence indicates that Mexican American children may experience higher rates of health problems and developmental deficiencies during their early years (Flores et al., 2002; Guendelman, English and Chavez, 1995; Padilla et al., 2002). Known as the *epidemiologic paradox* (Markides and Coreil, 1986), the phenomenon of relatively favorable birth outcomes (in spite of disadvantaged socioeconomic characteristics) among Mexican Americans has been extensively studied, but research on this population has generally not been extended to early childhood outcomes (although there are some key recent exceptions, reviewed below). Furthermore, none of this research has focused on Mexican American children born to unmarried women, a group that may be at greater risk for deteriorating health outcomes, despite the fact that over 40% of all births among Mexican Americans occur among unmarried women (Martin et al., 2003: Table 14).

Thus, the main objective of this paper is to document Mexican American health and health care outcomes in early childhood. Specifically, we conduct a comparative analysis of Mexican American children and children in other major race/ethnic groups at age three drawn from a national sample of births to unmarried women. We then present regression models that take into account important distinctions between children who have unmarried cohabiting parents and children who have unmarried non-cohabiting parents, both at the time of birth as well as by the time the child turns three years old. We include socioeconomic factors to best

determine if the health and health status differences in question are, at least in part, brought about by the sizable resource differentials across race/ethnic groups.

Review of Recent Literature

The key rationale for this work is succinctly summarized by Guendelman (1998: 282) who, in a major review of Hispanic health, stated that: “a question remains whether the protective factors available during pregnancy continue to sustain the health of Hispanic children after they are born.” Indeed, one important explanation for the positive birth outcomes among Mexican Americans involves strong family support systems (Guendelman, 1998). Qualitative studies of Mexican American mothers (Sherraden and Barrera, 1995, 1996) have shown that family support helps to attenuate the effects of living in poverty. Family support may also be related to lower stress during pregnancy and better access to pregnancy-related information and psychosocial health (Guendelman, 2000). Other research directly points to the importance of parental relationships for positive birth outcomes among Hispanics; whether within a marital union or not, cohabiting parental households were found to have lower risks of adverse birth outcomes relative to non-cohabiting parent households (Albrecht, Miller and Clarke, 1994).

The role of family structure in creating a strong support system for the child has been extensively analyzed. Overwhelming evidence has demonstrated that family structure has an important impact on child health and health care outcomes (McLanahan, 1997). In summarizing a large body of research on this topic, McLanahan (1997: 47) concluded that “growing up in a non-intact family had negative consequences for children’s well-being across a broad range of outcomes.” The Mexican American population has a relatively high level of non-marital childbearing. Data from 2002 show that 42% of births to Mexican American women were non-marital, which is well above the overall national figure of 34% (Martin et al., 2003: Table 14).

The high rates of nonmarital births in this population help define the key question that we wish to address in this paper: how do children born to unmarried Mexican American women fare in their early years in terms of health and health care outcomes? We conduct this analysis for a national sample of Mexican American children, comparing them to non-Hispanic black and non-Hispanic white children, in order to examine whether results differ across racial and ethnic groups. We focus on Mexican American children, as opposed to all Hispanic children, because it has been clearly demonstrated that there are substantial differences in health outcomes, demographic characteristics, and social characteristics across Hispanic subgroups (Bean and Tienda, 1987; Cho et al., 2004; Zsembik and Fennell, 2005). Due to small sample sizes in the data set, we are unable to conduct separate analyses of children in other Hispanic subgroups.

Given the bi-directional association between health outcomes and access to health care, we investigate each separately. We first look at health care. A number of studies in this area have indicated that Mexican American children are more likely to be uninsured than children from other race/ethnic groups and tend to have fewer physician visits when compared to children from other race/ethnic groups (Flores et al., 1999; Guendelman, 1998; Halfon et al., 1997; Scott and Ni, 2004; Solis et al., 1990). Most studies in the area, however, have not been able to separate Mexican American children whose parents are foreign-born from children whose parents are U.S.-born. Burgos et al. (2005) recently filled this gap by showing that second-generation Mexican American children (i.e., children of immigrants) were, by far, the most likely subset of Mexican American children to lack access to care and to under-utilize health care. Thus, it is important to separate out children of immigrants from children of native-born women (e.g., Padilla et al., 2004), which we do in our regression analyses. The Burgos et al. (2005) study included family structure as a covariate in their regression models, but did not specifically

examine children of unmarried parents.

We then examine health outcomes. Although some studies have concluded that the overall health of Mexican American children is very similar to that of non-Hispanic white children (Mendoza et al., 1991) or to socioeconomically-advantaged Cuban American children (Angel and Worobey, 1991), others have pointed to specific health issues that may be less favorable among Mexican Americans. Kimbro and her collaborators (2004) have recently shown that young Hispanic children are about 1.9 times more likely to be overweight or obese in comparison to non-Hispanic white or black children. Although this study did not break Hispanic children out into their component ethnic sub-populations, these findings are consistent with earlier reports for Mexican American children (Ogden et al., 2002). Furthermore, Guendelman (1998) found that Mexican American mothers are much more likely than non-Hispanic white mothers to report their children's health as fair or poor. They are also more likely to report higher levels of infectious diseases, higher risks of unintentional injuries, and higher risks of lead exposure for their children. On the flip side, some studies have shown lower risks of asthma among either Hispanic children (Boardman, Finch and Hummer, 2001) or among Mexican American children (Guendelman, 1998) compared to non-Hispanic white children. Largely due to data issues, relatively little of this work has separated out Mexican American children of immigrants from Mexican American children of native-born women. In addition, despite their generally higher risk, no work to date that we are aware of has focused on Mexican American children born to unmarried parents. This paper attempts to fill this gap.

Data and Methods

We use data from the Fragile Families and Child Wellbeing Study, a large, nationally based, longitudinal survey of unmarried parents conducted by researchers at Princeton and

Columbia Universities (see <http://crew.princeton.edu/fragilefamilies>; Reichman et al., 2001). The study follows a cohort of children born to unmarried parents from birth to age five, with the most current available data being the child follow-up at age three.¹ Important for present purposes, the data are unique in comparison to others that have been used to study Mexican American child health and health care at the national level because they are longitudinal and provide a rich array of family structure and socioeconomic variables. Baseline interviews (in hospitals, 1-2 days after the time of the child's birth) were conducted with 3,712 unmarried mothers in 20 cities across the United States between 1998 and 2000. Our analysis includes data from 2,111 children whose mothers were interviewed both at the time of birth and at the three-year follow-up, who were singleton births, and whose mothers identified as either Mexican American, non-Hispanic white, or non-Hispanic black. This includes 362 children born to Mexican Origin women, 347 to non-Hispanic white women, and 1,402 to non-Hispanic black women. When weighted, the data are representative of births that occurred to unmarried women in large (i.e., populations greater than 200,000) urban areas of the United States in the late 1990s. Like other recent studies using this data set (e.g., Carlson, McLanahan and England, 2004; Reichman, Corman and Noonan 2004), we do not use the weights because doing so would result in a loss of data from four of the 20 cities involved (Oakland, Newark, Detroit, and Milwaukee), which were not included in the weighted representative sample.

The Fragile Families data are particularly suited for our study, as they include a diverse array of health and health care outcomes among children at age three. The outcome measures included at the 3-year follow-up are: (a) a maternal assessment of overall child health, divided into optimal (excellent or very good) and sub-optimal (good, fair, and poor); (b) whether or not the child has been diagnosed with asthma; (c) whether the child is considered to be

overweight/obese or not, which is based on actual measurements and weights of each child and comparisons of the resulting body mass index values to Center for Disease Control and Prevention definitions of overweight, obesity, and normal weight (Kuczmarski et al., 2002; also see Kimbro, Brooks-Gunn and McLanahan, 2004) ; (d) whether or not the child experienced one or more emergency room visits during the most recent year; (e) whether or not the child received two or more physician visits for illness or accident during the previous year; and (f) the type of health insurance coverage for the child – none, government, or private/HMO. We consider the first three outcomes (maternal evaluation of health, asthma, and weight status) to be more reflective of health itself and the latter three (emergency room visits, number of doctor visits and type of insurance coverage) to be more indicative of access to care. However, we fully acknowledge that such “health” and “health care” outcomes are correlated with one another (e.g., a diagnosis of asthma cannot be made without a visit to a health provider) and, thus, we try to interpret the differentials we uncover taking into account the bigger picture presented by the six outcomes.

The race/ethnic groups that we analyze here, based on maternal reports, are Mexican American, non-Hispanic white, and non-Hispanic black; we designate non-Hispanic whites as the reference category in our regression analyses because of their overall advantaged status in American society. We include a dummy variable for maternal nativity to distinguish children who were born to foreign-born or U.S.-born women; thus, the foreign-born dummy variable largely serves as an indicator for second-generation Mexican American children, given that very few black or white children had foreign-born mothers. We control for basic demographic characteristics in our regression analyses: sex and age of the child and age of the mother. We also include a dummy variable for low birth weight to control for health status at birth; thus, the early

childhood health and health care differences that emerge in our more complete regression models are net of those that are associated with birth outcomes as measured by low weight.

As discussed above, we focus on two sets of factors that are associated with both race/ethnicity and child health and health care outcomes, family structure and socioeconomic status. Parental relationship status/change is measured as: (a) cohabiting at both the time of the child's birth and age three, which is the reference category; (b) cohabiting at child's birth and married at the age-three follow-up; (c) cohabiting at child's birth and not cohabiting at age three; (d) not cohabiting at child's birth and cohabiting at age three; (e) not cohabiting at child's birth and married at age three; and (f) not cohabiting at either the time of the child's birth or age three. Differentiating unmarried cohabiting parents from unmarried non-cohabiting parents is an important expansion in comparison to much of the literature in this area that only examines a married-unmarried dichotomy. We also include two indicators for socioeconomic status: household income (\leq \$15,000, \$15,001-30,000, 30,001+, and missing) and maternal education (<12 years, 12 years, 13+ years). The most advantaged categories of these variables are designated as the reference groups in our regression analyses.

In the results, we first present cross-tabular relationships between race/ethnicity and the health and health care outcomes; similarly, we present cross-tabular results of race/ethnicity by the predictor variables. The focus, of course, is on how Mexican American children vary from their black and white counterparts. Our regression analysis then separately examines each of the six health and health care outcome measures in question. We employ logistic regression to estimate the relationship between race/ethnicity, our other predictor variables, and a set of dichotomous health outcomes. For the health insurance outcome, which is broken into three possible categories, we employ multinomial logistic regression (Powers and Xie, 1999). In all of

the models we estimate, we control for state fixed-effects (not shown) because the children within this data set are clustered within 15 states that have different policy environments that may affect their health outcomes. STATA software is used to estimate all of the models.

Results

Descriptive Data. Table 1 shows distributions of sociodemographic characteristics and health and health care outcomes for Mexican American children born to unmarried parents, as well as for non-Hispanic blacks and whites, at three years of age. Because these percentages reflect characteristics for children born to unmarried women, they tend to be less favorable than what is exhibited in general nationally based population studies. Four sociodemographic features stand out. First, as might be expected, the percentage of children born to a foreign-born mother is the highest, by far, among Mexican Americans (39.5 percent), with only very small percentages among white (1.7 percent) and black (2.4 percent) children. Second, the percentage of births that are of low weight is very low among Mexican Americans (5.6%) – and also very similar to the overall level of low birth weight among Mexican American children at the national level (Frisbie and Song 2003). For white and black children, however, the percentage of low weight births is much higher in this sample: 12.1 percent and 13.3 percent, respectively. Thus, the epidemiologic paradox – at least for birth outcomes – seems to be magnified among this unmarried sample compared to studies that have used national population data containing both unmarried and married women (e.g., Frisbie et al. 1998; Frisbie and Song 2003).

Table 1 about here

Third, the relationship status of unmarried mothers varies dramatically by race/ethnicity. Mexican American children were the most likely to be living with parents who are cohabiting at both birth and at age three (28.5 percent), the most likely to be living with parents who were

cohabiting at birth and then married at age three (17.4 percent), and the least likely to have cohabiting parents at birth who were not living together at age three (17.7 percent). Moreover, Mexican American children were most likely to experience the marriage of their parents by age three when the parents were not living together at the time of the birth (4.7 percent). Together, these figures suggest greater parental relationship stability for Mexican Americans in comparison to whites and blacks among this national sample of children born to unmarried parents.

Fourth, there are sizable socioeconomic resource differentials by race/ethnicity. Although this is expected when examining national data from both unmarried and married parents, it is noteworthy because we are analyzing an exclusively unmarried birth sample. Maternal education varies most considerably across groups, with far more Mexican Origin women having less than a high school education (57.6 percent) compared to white women (31.1 percent) and black women (36.1 percent). Household income also differs considerably, with the percentage of children who live in households with an income of \$15,000 or less highest among blacks, lowest among whites, and in between for Mexican Americans. Regardless of these variations, clearly the data confirm that children born to unmarried parents experience low socioeconomic status across all race/ethnic groups.

Looking at the health and health care outcomes at the bottom of Table 1, a significantly higher proportion of Mexican Origin mothers report less than optimal health (good, fair, or poor) for their children than do non-Hispanic white or non-Hispanic black mothers. Indeed, 20.3 percent of Mexican Origin mothers report good, fair or poor health for their child, compared to 13.6 percent for non-Hispanic whites and 15.5 percent for non-Hispanic blacks. However, overall health status reports may in part reflect language and interpretative differences across groups that tend to lower the values for Mexican Americans, especially among immigrant

respondents (Angel and Guarnaccia, 1989; Cho et al., 2004; Finch et al., 2002). Our regression analysis below will shed further light on this by separating out the children of immigrants from the children of U.S.-born women. Similarly, the health of Mexican American children is less favorable than is that of white and black children, based on a measure of body weight (Kimbro, Brooks-Gunn and McLanahan, 2004). Fully one-third of Mexican American children in this sample are considered to be overweight or obese at age three compared to about a quarter of black children and white children. On the other hand, children born to Mexican Origin women look more favorable when examining reports of asthma. The rates of asthma among Mexican American children (16.1 percent) falls somewhere between that of white children (13.9 percent) and black children (25.1 percent).

In terms of health care outcomes, Table 1 shows that 13.0 percent of Mexican Origin mothers report having neither public nor private health insurance for their child, compared to 12.1 percent and 6.9 percent for non-Hispanic whites and blacks, respectively. Although Mexican American children were less likely to be covered by private insurance (21.0 percent) than non-Hispanic white children (29.4 percent), black children were the least likely to be covered by private insurance (17.9 percent). As expected in a sample of unmarried mothers, all three groups have high levels of public insurance coverage. However, the level for Mexican American children (66.0 percent) is much lower than it is among black children (75.3 percent) – helping to result in an overall higher uninsured level among the Mexican American population. Mexican American children (36.1 percent) were also far less likely than white children (48.7 percent) to have had two or more doctor visits in the past year, although the level for black children (32.9 percent) was somewhat lower than for Mexican American children. Mexican Americans also have the lowest percentage of children who made an ER visit in the past year

(28.3 percent). Overall, the descriptive results for health care outcomes clearly show less access and utilization for Mexican American children compared to white children.

Regression Analyses. Table 2a examines race/ethnic differences in child health status at age three. Looking at the overall maternal reports of child health, Model 1 indicates that children of Mexican American women are not statistically different than white children, net of child and maternal demographic characteristics. The odds ratio for maternal nativity, however, indicates that children of foreign-born mothers have 57 percent higher odds of less than optimal child health compared to children of U.S.-born women. Such a difference is consistent with earlier reports of overall adult health among the Mexican Origin population, especially among immigrants, being worse than whites, possibly because of interpretive, language, and cultural differences in the way that such questions are asked and answered (Angel and Guarnaccia, 1989; Cho et al., 2004; Finch et al., 2002). Thus, substantial caution is warranted in interpreting the overall differences between children of immigrant and native-born women as indisputable evidence of poorer child health among children of Mexican immigrants. As an important aside, note that the children whose parents were not living together at age three (i.e., those in either the “cohabiting-other” category or those in the “other-other” category) were the most likely to be reported to be in less than optimal overall health.

Table 2a about here

The next set of columns in Table 2a focus on reported diagnosis of childhood asthma. Although black children of unmarried parents experience a level of asthma about twice that of their white counterparts (Boardman, Finch and Hummer, 2001), there are no statistically significant differences between the reported levels for Mexican American children and whites. What is striking is the significantly lower level of reported asthma for children of foreign-born

women compared to children of native-born women, with odds ratios for Models 1 and 2 ranging between 0.53 and 0.54. Although suggestive of significantly lower levels of asthma among children of immigrants, this finding should also be interpreted with caution because of the overall lower access to health care experienced by this group, as we will show in our analysis of health insurance (Table 2b below). It is important to point out the significantly higher levels of asthma experienced by children who are in the “other-other” relationship change category. This could indicate that this subset of children born to unmarried parents, which is not small in size (i.e., between 25 and 50 percent – depending on race/ethnic group – of all the children in our data set), is living in the highest risk environments for asthma.

The final set of columns in Table 2a report on race/ethnic differences in overweight/obesity. Mexican American children display about 60 percent higher odds than white children, net of the complete set of variables included in the models. Children of foreign-born women do not differ from children of U.S.-born women, suggesting that the higher level of overweight/obesity among Mexican American children is found among children with U.S.-born parents. Seemingly, then, based on our analyses, both the asthma and weight status outcomes are far more favorable for Mexican American children whose mothers are foreign-born compared to Mexican American children whose mothers are U.S.-born. Although this was not found to be true with the overall health status variable, the cultural-language factors involved in answering that item make it much more suspect than the other two, more objective, health outcomes.

Table 2b about here

Table 2b shows the results of regression analyses of health care as a function of the same set of variables used to predict health outcomes. The first set of columns shows differences in the odds of having at least one emergency room visit in the past year. We find that Mexican

American children do not vary in comparison to white children. Further, the nativity differential – while leaning in the direction that favors children of foreign-born women – is non-significant throughout. The greatest difference in terms of emergency room visits throughout each of the models is between black and white children.

The next set of columns examine differences in children receiving 2+ doctor visits in the past year. Both children of foreign-born women and black children exhibit much lower odds than children of U.S.-born women and white children, respectively, on this indicator. Simply put, children of immigrant women and black children are seeing physicians less often than children of native-born women and white children.

Finally, Table 2b reports results from multinomial logistic regression models that examined race/ethnic differences in type of health insurance coverage among this national sample of children born to unmarried women. The results reveal very large differences based on race, ethnicity and mothers' nativity. Model 1 indicates that both Mexican American and black children born to unmarried parents are far more likely than are white children to rely on public insurance. By including nativity, Model 1 also shows that reliance on public coverage is also much higher among children of immigrant mothers in comparison to children of native-born mothers. Moreover, children of immigrant mothers experience over three times the odds of complete non-coverage compared to children of native-born mothers – a difference that is weakened somewhat, but not fully, with the inclusion of the socioeconomic variables and relationship status variables in Model 2. Thus, despite the fact that children of immigrant women in our data set are, themselves, born in the U.S. and citizens of the U.S. based on the way that the sample was drawn in U.S. hospitals, these children are by far the most likely to be completely uninsured.

Beyond the very important nativity difference in insurance coverage, the heavier reliance on public coverage for Mexican American children compared to white children is fully accounted for with the inclusion of socioeconomic characteristics and relationship status variables in Model 2. Indeed, socioeconomic differences in insurance coverage are substantial across both the household income and maternal education variables included here. In terms of relationship status, the key finding is that children who have parents who are cohabiting at the time of the child's birth and later marry are the least likely to rely on public insurance and the least likely to be completely uninsured. Thus, parental marriage is associated with a much higher level of private/HMO coverage among children.

Conclusion

This paper set out to document and assess health and health care among an understudied population—Mexican American children born to unmarried parents. Although much research has documented the relatively advantaged birth outcomes of Mexican American infants given their socioeconomic disadvantage (Frisbie, Forbes and Hummer, 1998; Reichman and Kenny, 1998; Ventura et al., 2001: Table 25), some research suggests that child health among this population may worsen with time vis-à-vis non-Hispanic whites due to a variety of social risk factors (Flores et al., 2002; Guendelman, English and Chavez, 1995; Padilla et al., 2002). One such factor is parental relationship status, which is especially relevant to child health given prior research underscoring the protective role of family support on health outcomes among children in the United States (McLanahan, 1997). However, little is known about the health and health care of Mexican American children born to unmarried parents (Martin et al., 2003).

Our findings provide evidence that, among children born to unmarried parents, the early health advantage of Mexican American infants runs the risk of being compromised by the time

the children reach age three. Mexican American children born to unmarried parents differ in significant ways from white and black children born to unmarried parents, and among Mexican American children, health outcomes differ by generation. Mexican American children of U.S.-born parents are far more likely to be overweight or obese at age three than their black, white or second-generation counterparts, but they do not differ significantly from white children in terms of the overall health report, asthma diagnosis, emergency room visits, doctor's visits or health insurance coverage when accounting for differences in socio-demographic characteristics. Children of Mexican-born parents, on the other hand, show worse overall health reports (which can be potentially misleading —see Angel and Guarnaccia, 1989; Cho et al., 2004; and Finch et al., 2002) and similar levels of overweight to white children. The main difference for children of immigrants is that they appear to be far less likely to have health insurance coverage. Indeed, they have significantly lower levels of doctor-diagnosed asthma, are far less likely to have gone to the doctor two or more times in the past year and are three times more likely than white three-year-olds to have no health insurance.

Descriptive results in our study reveal substantial racial/ethnic differentials in family resources among children born to unmarried parents. They account for all (in the case of children of U.S.-born mothers) or part (in the case of children of Mexican-born mothers) of the difference in health insurance coverage between Mexican American children and white children. Although they do not explain away the racial/ethnic difference in other health outcomes of the three-year-olds, it raises the question of whether the socio-economic disadvantage of the Mexican Americans could translate into poor health outcome in the long run, particularly through the lack of access to health care.

On the other hand, among those born to unmarried parents, Mexican American children are the most likely to live with parents who are married or cohabitating at age three. And consistent with previous studies, our regression analyses show more favorable health outcomes for children who live in an intact family at year three—namely, with parents who are married or cohabiting. In light of these results, we expect that family support will play a positive role in the health outcomes of Mexican Americans across time, even for children who were born into an unmarried household, although the extent to which these protective factors will attenuate the disadvantage in socio-economic resources has yet to be studied.

Our analysis has several limitations, including a smaller overall sample size for each race/ethnic group than would be ideal and some loss to follow-up over time. Nevertheless, the data set provides an important opportunity to follow the health trajectory of Mexican American children across time due to its longitudinal design. Our analysis would also benefit from a more complete set of health measures to help distinguish between health status and access to care.

Indeed, our conclusions reflect the incomplete picture that our outcomes allow us to draw of child health and health care access, as many of our outcomes reflect both health status and access to care. However, among this sample of children born to unmarried parents, Mexican American children born to U.S.-born mothers do not maintain a clear health advantage relative to whites, despite their very low rate of low birth weight. Indeed, the high level of overweight and obesity among third-generation-plus Mexican American children suggests potential long-term health risks (Must et al. 1999; Muntner et al. 2004; Nead et al. 2004).

For children born to Mexican-born parents, the story is less about health outcomes than it is about access to care. With timely policy intervention, it may be possible to maintain the healthy beginnings of Mexican American children. The obvious policy implication of our work

is that of needed health insurance coverage for children of immigrants. These children are U.S. citizens by virtue of their birth in the United States, yet they are much more likely than children with native-born parents to be left out of the health care system (Weil and Feingold, 2002). The health consequences over time of their exclusion from the health care system are yet to be uncovered but could prove potentially devastating.

Endnotes

1. The Fragile Families Data Set also includes a small sample of births to married women as well. When broken down by race/ethnicity and nativity, this sub-sample was too small to support a comparison analysis of health and health care outcomes among children born to married women.

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	Mexican	White	Black	Chi-Square	
Socio-demographic Characteristics					
% Mother Foreign-born	39.5	1.7	2.4	528.1	***
% Mother under 25 at birth	64.6	65.1	65.6	0.1	
% Infant Low Birth Weight	5.6	12.1	13.3	16.6	***
Child Mean Age (in months) at Year 3	39.2	38.3	38.4		
% Child Female	50.1	47.8	46.1	2.0	
Parents relationship change: birth to age 3					
% Cohabiting to cohabiting	28.5	23.7	13.5	528.1	***
% Cohabiting to married	17.4	15.9	5.0		
% Cohabiting to other	17.7	22.3	20.9		
% Other to cohabiting	6.1	6.7	8.2		
% Other to married	4.7	2.6	2.6		
% Other to other	25.7	28.9	49.8		
Household Income at age 3					
% \$15,000 or less	37.6	28.0	46.9	70.7	***
% \$15,001 to \$30,000	30.9	32.0	25.6		
% Over \$30,000	11.6	7.5	10.8		
% Missing	19.9	32.6	16.7		
Mother's Education					
% Less than high school	57.6	31.1	36.1	72.0	***
% High school or equivalent	22.2	35.5	37.5		
% Some college or higher	20.2	33.4	26.3		
Mother's Health Evaluation of Child					
% Good/Fair/Poor (vs. Exc/V Good) at Age 3	20.3	13.6	15.5	6.7	**
% Doctor Diagnosed Asthma at Age 3	16.1	13.9	25.1	28.5	***
% Child overweight or obese at Age 3	33.2	23.1	25.8	37.9	***
% One or more ER visits in last year	28.3	31.7	39.2	17.9	***
% 2 or more doctor's visits in last year	36.1	48.7	32.9	30.2	***
Child's health insurance at age 3					
% Private	21.0	29.4	17.9	48.4	***
% Public	66.0	58.5	75.3		
% None/Other	13.0	12.1	6.9		
N	362	347	1402		
Percent of total	17.1%	16.4%	66.4%		
<i>Source: Fragile Families and Child Wellbeing Study</i>					
* significant at .10; ** significant at .05; *** significant at .01					

	mother's race/ethnicity and sociodemographic characteristics						Asthma		Overweight/Obese	
	Mother's Health Report			Asthma			Overweight/Obese			
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2		
Mother's race/ethnicity [non-Hispanic white]										
Mexican Origin	1.52	1.40	1.32	1.25	1.57 *		1.60 **			
Non-Hispanic Black	1.10	0.99	2.02 ***	1.81 ***	0.96		1.02			
Mother foreign-born [U.S. Born]	1.57 *	1.55 *	0.53 **	0.54 **	0.94		0.94			
Mother's age at child birth [25+]										
Less than 25	0.95	0.86	1.18	1.11	1.08		1.09			
Infant low birth weight [2500+ grams]	1.40 *	1.35 *	1.53 ***	1.48 **	0.63 **		0.64 **			
Child age at interview (continuous in months)	0.98	0.97	1.00	0.99	1.04 **		1.05 **			
Child sex male [female]	1.37 **	1.38 **	1.60 ***	1.58 ***	1		1.01			
Relationship change [cohabiting-cohabiting]										
Cohabiting-married		1.37		1.10			1.14			
Cohabiting-other		1.60 **		1.26			0.94			
Other-cohabiting		1.43		1.11			0.72			
Other-married		1.12		0.77			0.81			
Other-other		1.62 **		1.60 ***			0.97			
Household Income [>\$30,000]										
<=\$15000		0.86		1.06			0.99			
\$15,001-\$30,000		0.88		0.96			1.15			
Missing		0.78		0.98			1.1			
Mother's education [some college plus]										
Less than high school		1.48 **		1.29			1			
High school or equivalent		1.03		1.17			0.96			
Observations	2,060	2,060	2,068	2,068	1629		1629			
-2*Log likelihood	1776.59	1757.29	2054.24	2036.01	2039.573		2034.544			
Degrees of freedom	21	31	21	31	21		31			
<i>Source: Fragile Families and Child Wellbeing Study</i>										
* significant at 10%; ** significant at 5%; *** significant at 1%										
1. All models control for fixed state effects.										
2. Reference categories for predictor variables are in [brackets].										

Table 2b. Odds ratios predicting one or more ER visits, two or more doctor's visits and health insurance coverage by mother's race/ethnicity and sociodemographic characteristics

	ER Visits			Doctor's Visits			Child's Health Insurance Coverage			
	Model 1	Model 2		Model 1	Model 2		Public Model 1	None/other Model 1	Public Model 2	None/other Model 2
Mother's race/ethnicity [NH white]										
Mexican Origin	1.09	1.06		0.74	0.77		1.67 **	1.04	1.09	0.66
NH Black	1.42 **	1.33 **		0.56 ***	0.59 ***		2.16 ***	0.93	1.37 *	0.67
Mother foreign-born [U.S. Born]	0.77	0.79		0.46 ***	0.47 ***		2.03 ***	3.33 ***	2.02 **	2.94 ***
Mother's age at birth [25+]										
Less than 25	1.10	1.08		0.87	0.91		1.75 ***	1.34	1.31 *	0.99
Infant low birth weight [2500+ gran]	0.92	0.90		1.1	1.12		1.23	0.97	1.00	0.80
Child age at interview (months)	0.94 ***	0.94 ***		0.95 ***	0.95 ***		0.97	1.08 **	0.95 **	1.05 *
Child sex male [female]	1.04	1.04		1.06	1.06		0.97	0.92	0.90	0.87
Relationship change										
[cohabiting-cohabiting]										
Cohabiting-married		1.09			1.43 *				0.47 ***	0.38 ***
Cohabiting-other		1.19			1.02				0.93	0.50 **
Other-cohabiting		1.13			0.89				0.86	1.09
Other-married		1.35			1.23				0.77	0.67
Other-other		1.22			1.09				1.20	0.71
Household Income [>\$30,000]										
<=\$15000		1.19			0.86				5.84 ***	4.82 ***
\$15,001-\$30,000		1.09			0.99				1.53 **	0.98
Missing		1.02			0.99				0.36 ***	0.52 *
Mother's education										
[some college plus]										
Less than high school		1.06			0.83				2.68 ***	3.54 ***
High school		1.11			0.93				1.77 ***	1.40
Observations	2,062	2,062		2,062	2,062		2,072	2,072	2,072	2,072
-2*Log likelihood	2631.73	2625.27		2606.82	2595.11		3076.58	3076.58	2638.35	2638.35
Degrees of freedom	21	31		21	31		42	42	62	62

Source: *Fragile Families and Child Wellbeing Study*

* significant at .10; ** significant at .05; *** significant at .01

1. All models control for fixed state effects.

2. Reference categories for predictor variables are in [brackets].

