

Reducing Disparities in Dental Care for Low-income Hispanic Children

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Abstract: Using a social ecological model, this study examined the influences of socio-demographic factors, mother's attitudes, financial barriers, and the health care delivery system on the use of dental services for 4–8 year-old Hispanic children. Initiating dental care during the preschool years was significantly related to the mothers' beliefs and her social network's beliefs in the value of preventive dental care. The mother was almost four times more likely to continue the care if she believed that dentist visits would keep the child's teeth healthy. Extended clinic hours in the evenings also increased the likelihood of the mother's return to the dentist to continue child's care. It was not the mother's attitudes but provider availability, dental insurance (including Medicaid) and family income that were related to frequency of planned visits. The study findings can be used in improving access to care and reducing barriers for low-income, urban Hispanic children.

Key words: Access to dental care; Hispanic children; provider availability.

Despite steady improvement in oral health status in the United States, dental disease continues to present substantial health problems to many low-income and minority populations. Since the release of the first Surgeon General's report on oral health, profound disparities in dental care have been widely recognized. The report calls for expanding efforts to improve oral health and to address disparities in oral health care in every community in the country.^{1,2,3,4}

Improving oral health status is especially critical for Hispanic children, who recently became the largest ethnic minority group of children in the United States, constituting 16% of the population younger than 18 years.⁵ The prevalence of unmet needs for dental treatment is disproportionately high in multiple age groups among Hispanic children compared with the prevalence among other ethnic minority children.^{6,7} Moreover, disparity in the use of dental services by the Hispanic population is particularly acute.^{8,9} *Healthy People 2010* points to oral health problems specific to Hispanic children, particularly low-income children.¹⁰

Hispanics are less likely than other ethnic minority populations to have private dental insurance and are more likely to seek dental care in response to occurring symptoms rather than for preventive reasons.¹¹ The proportion of Hispanic dentists, or even dentists who speak Spanish or otherwise demonstrate competence in Hispanic culture, is not keeping pace with the oral health needs of the Hispanic

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population in the U.S. It is estimated that Hispanics make up only 2.8 % of U.S. dentists.¹² The scarcity of Hispanic dental care providers is arguably related to lower access to oral health care for this population.¹³

Many published explanations of poor access to health services among poor and minority populations have focused on financial constraints or on attitudes and priorities concerning health care.^{8,11,14} This study investigated structural impediments of the dental care delivery system, such as provider availability, convenience in accessing care, and care coordination. The purpose of this study is to examine the community level factors related to dental care utilization by members of the Hispanic community in Chicago. The following questions were addressed in this study: 1) What factors predict dental service use within a low-income Hispanic population? 2) Do these factors vary by the type of dental service used? 3) Is the variation in dental service use due to care delivery system factors or to beliefs of the individual and his or her social network beliefs?

Methods

Sampling procedures and study samples. The study subjects were 320 Hispanic mothers of children aged from four to eight years attending public schools and Head Start Centers in three targeted community areas in Chicago. The age range for the target child was chosen based on previous study findings on the prevalence of tooth decay, untreated cavities, and the need for pediatric care. It has been reported that Hispanic preschoolers are 2.5 times more likely to have tooth decay than their Caucasian counterparts.¹⁵ Additionally, among children aged from six to eight years, the percentage of untreated dental decay was found to be substantially higher among Hispanics (43%) than among Caucasians (26%).¹⁰ Four to eight year-old children are heavy users of pediatric care and well-child visits; furthermore, compared with mothers of children in other age groups, mothers of six to eight year old children have had more recent experiences obtaining health care for their children and therefore can more accurately describe her reactions.

The community areas were chosen based on data from the 1990 U. S. Census and the City of Chicago Planning Council community indicators (e.g., percentage of persons living in poverty, overcrowded areas, and dilapidated housing). Neighborhoods that included both Puerto Rican and Mexican American residents were selected if more than 30% of their residents identified themselves as Mexican American or Puerto Rican and if over 30% of residents lived below the poverty level. Three areas fit these criteria and provided our sampling frame.

Thirty-five public elementary schools were listed in these areas.¹⁶ Of these, 17 schools had at least 30% of Puerto Rican students and 20–30% Mexican American students. There were 637 eligible Hispanic children aged four to eight years at those schools that agreed to assist in the recruitment. Mothers younger than 18 years of age were excluded since their practices are likely to be substantially different than those of older mothers and because they might well not have the primary responsibility for raising their children. Invitations to participate in the study were sent to the mothers of these children, and 434 mothers responded to the invitation (for a response rate of about 68%). Some of the mothers who had agreed to be

interviewed did not show up for the interview or declined to participate further. Two callbacks were made to each parent mother who failed to show for the interview so that the investigator could reschedule. Three hundred and twenty valid interviews were completed in the study period. Bilingual (Spanish/English) and bi-cultural interviewers conducted the interviews in the language preferred by the mother. The University of Illinois at Chicago Institutional Review Board approved the research protocol, sample recruitment, and informed consent.

Measures. The interview questions used in this study were developed through focus groups with a total sample of 69 Mexican American and Puerto Rican mothers and fathers. After the interview questions were developed and selected, extensive pre-testing was carried out and the questionnaire was revised. The completed questionnaire was reviewed by Survey Research Laboratory (SRL) personnel at the University of Illinois at Chicago to check for formatting and data tracking. Questions initially were written in English, then translated into Spanish, and finally back translated into English.

Measures included interview questions about social norms, provider characteristics, the mother's acculturation, and the mother's attitudes towards her child's dental care. Socio-demographic measures included age, family income, education, and length of U.S. residence. Dental insurance coverage was assessed by asking if the child had been covered by any form of dental insurance (including Medicaid) in the past 12 months. Medicaid, other forms of government-subsidized health insurance, health insurance from employers, and any other type of health insurance were included in the types of dental insurance considered.

Acculturation was measured using the Marin short acculturation scale, a widely used 13-item Hispanic acculturation index (Cronbach's alpha, $r=0.82$). The Marin scale focuses on language proficiency, preference, and ethnicities of friends in the respondent's social network.¹⁷ The mother's attitudes towards the child's preventive dental care were measured in terms of importance assigned to dental visits, attitude about the seriousness of cavities, belief concerning age for initiation of care, and self-rated efficacy of taking the child to a dentist. In this study, acculturation (measured by the Marin short acculturation scale) did not correlate significantly with the mothers' attitude toward dental care and utilization of services.

Social norms were measured as the importance the members of the mother's social network placed on taking the child to the dentist on a regular basis and having first visits to the dentist during the child's preschool years. Financial resources and convenience in accessing care (e.g., waiting time, travel time) provided the means for an individual to make use of available services. To investigate the burden of dental costs on study participants, mothers were asked about (1) the extent to which dental costs prevent her from taking her child to a dentist; (2) whether she is asked to pay something at such visits; (3) getting reimbursement from any dental insurance program; and (4) if she lacked any insurance, whether the costs prevent her from taking her child to a dentist. Convenience in accessing care was measured as a long waiting time, travel time to the clinic, and the dentist being close to where the family lives. Provider characteristics included availability of extended clinic hours and care

coordination such as referrals to a dentist and reminders being sent for upcoming appointments.

Starfield identified three critical attributes of primary care that positively affect health outcomes: early initiation of first contact, continuity of care and regular planned visits.¹⁸ Three measures were used to assess utilization of dental services: age at first visits; planned preventive dentist visits; and continuity of dental care (i.e., returning to the same provider).

Results

Three hundred and twenty ($n=320$) interviews were completed in the study period. Socio-demographic characteristics are shown in Table 1. Of the 320 respondents, 69 (22%) identified their family background as Puerto Rican, 221 (69%) as Mexican, and 30 (9%) said they had some other Latino/Hispanic background (in Central or South America). Puerto Rican mothers had significantly more schooling (12 years) than others among the Hispanic mothers interviewed ($p < 0.05$). Puerto Ricans were significantly more acculturated and resided longer in the U.S. than Mexicans and other Hispanic groups in the sample ($p < 0.05$). The majority of respondents (80%) reported an annual household income of less than \$25,000. Ninety-three percent of the children had participated in free or reduced-price meal programs at schools. Significantly, Mexican families did not have as much dental insurance (Medicaid or private employer) as Puerto Rican and other Hispanic families (Table 1). Over one third of the Mexican families never had dental insurance for the child and only one-half had coverage for the entire past year (Table 1).

Table 2 shows ethnic differences in utilization of dental services; such differences were not significant. Eighty-nine percent of the mothers in this study reported that their children had been seen by a dentist at least once. Since the family had to submit an Illinois Department of Public Health Child Health Examination Form that included physical and oral health information for admission to school, most children in this study had received a dental check-up. The children's mean age of initiation of dental care was 34 months of age. Approximately 61% of the mothers planned on taking her child to the dentist twice a year. Medical provider coordination between pediatrician and dentist was not present for most of the families. Only 22% of the mothers received a referral to a dentist from the child's pediatrician (Table 2).

Bivariate analysis results. Family income, dental insurance coverage (including Medicaid), and provider availability on weekend hours were associated with the frequency of planned dentist visits. The mother's social network's affirmation of the importance of taking the child to the dentist on a regular basis also affected the frequency of planned visits (Table 3).

Important correlates of continuity of care (i.e., returning to the same doctor) were the mother's attitudes and enabling factors. Mothers who felt a higher cost burden for care and who had a family income high enough to make them ineligible for Medicaid benefits were significantly less likely than others to return to the dentist. Provider availability in the evenings and sending reminders about upcoming appointments, the mother's belief in the importance of dental visits during early preschool years and in preventive care to keep the child's teeth healthy, and self-

Table 1.

SOCIO-DEMOGRAPHICS ACROSS THE HISPANIC SAMPLES

Characteristics	Mexican n=221 (69%)	Puerto Rican n=69 (22%)	Other Hispanic n=30 (9%)	Total Sample N=320
Mother's age (mean, years)	32.2	33.1	32.7	32.5
Mother's education (mean, years)*	8.6	12.0	11.0	9.5
Less than high school (%)	70.3	29.0	41.4	58.7
High school or equivalent (%)	17.8	23.2	34.5	20.5
More than high school (%)	11.9	47.8	24.1	20.8
Length of residency in the U. S. (mean, years)**,*	11.3	18.7	12.1	12.4
Acculturation (mean)**	1.91	2.89	2.54	2.18
Ethnic identity (mean)	2.82	3.00	2.90	2.87
Household annual income (%)				
Less than \$ 4,999	6.0	13.4	3.6	7.4
\$5,000-\$9,999	16.7	20.9	14.3	17.0
\$10,000-\$14,999	26.0	22.4	17.9	24.8
\$15,000-\$24,999	31.2	25.4	35.7	30.3
\$ 25,000-\$34,999	13.5	11.9	17.9	13.5
More than \$35,000	5.6	6.0	10.7	6.4
Participating in free or reduced-price meal Program at schools (%)	92.4	93.5	96.4	93.0
Dental insurance past 12 mos.*(%)				
Never	36.2	14.5	20.0	30.0
Few months	5.5	1.4	0	4.1
Most months	6.0	2.9	6.0	5.0
All year	52.3	81.2	76.7	60.9

*Length of residency in mainland U. S.

* p < 0.05

** p < 0.01

rated efficacy of taking the child to a dentist each significantly correlated with returning to the same dentist.

The initiation of dental care, measured by age of first visit, was significantly correlated with acculturation, length of residence in the U.S., and education level. Mothers who had resided in the U. S. longer and who had higher levels of acculturation took their children for the first dental visit at younger ages than mothers who were less acculturated or who had resided in the U.S. for fewer years. Children without dental insurance tended to first visit a dentist at older ages. Though family income was not related to the age of first visit, higher cost burden of going to the dentist was related to taking the child to the dentist at older rather than younger years.

Table 2.**DENTAL SERVICES UTILIZATION ACROSS THE HISPANIC SAMPLES**

Characteristics	Mexican n=221	Puerto Rican n=69	Other Hispanic n=30	Total Sample N=320
Dental Service Use				
Initiation of dental care:				
Child's age at first visits (months)	35.4	31.5	30	34.1
Frequency of planned visits (%)				
Less than one per year	0.5	0	0	0.4
One time per year	31.9	15.3	40.7	29.2
Two times per year	57.6	76.3	55.6	61.4
More than two times per year	9.9	8.5	3.7	9.0
Continuity of care (%):				
Yes (Return to the dentist)	75.7	75.8	76.7	75.8
No (Not return to the dentist)	24.3	24.2	23.3	24.2
Referrals from child's pediatrician				
Yes	23.1	18.2	23.3	22.1
No	76.9	81.8	76.7	77.9

Table 3.**BIVARIATE ANALYSIS OF INDIVIDUAL FACTORS, FINANCIAL BARRIERS, AND CARE DELIVERY SYSTEM**

Factors	Outcome measures: Dental Services Utilization		
	Frequency of Planned Visits β Coefficient	Continuity of Care Odds ratios (95% CI)	Initiation of Care β Coefficient
Individual Factors			
Socio-demographic characteristics			
Length of residence in the U.S.	-0.05	1.02 (0.98-1.05)	-0.14*
Acculturation	0.04	0.99 (0.97-1.02)	-0.17**
Education	0.07	0.95 (0.88-2.63)	-0.12*
Mother's attitudes toward dental care			
Importance of dental visits during child's preschool years	-0.09	2.08 (1.11-3.9)**	-0.22**
Belief in child's age at first visit	0.08	0.89 (0.75-1.06)	0.31**
Seriousness of cavities in baby teeth	0.09	1.19 (0.87-1.63)	-0.04

Seriousness of cavities in permanent teeth	-0.09	1.47 (0.81-2.70)	-0.03
Dentist's visits without child's being frightened / uncontrolled	0.03	1.31 (1.02-1.68)*	-0.10
Regular visits keep child's teeth healthy	0.02	3.18 (1.78-5.71)**	-0.41**
Social network's beliefs			
Importance of regular dentist visits	0.14*	1.62 (0.93-2.81)	-0.02
Belief in child's age at first visit	0.001	0.99 (0.75-1.06)	0.27**
Financial Barriers			
Family income	-0.13*	0.78 (0.65-.98)*	-0.04
Dental insurance	0.18*	1.16 (0.96-1.34)	-0.15*
Cost burden			
Dental care cost prevent from taking child to a dentist	-0.02	0.69 (0.49-.96)*	0.14*
Pay something at the dentist visits	-0.10	0.86 (0.71-1.04)	0.09
Getting reimbursement from insurance company	-0.14	0.02 (0.01-1.03)	0.16
Without insurance, cost prevent from taking child to a dentist	0.04	0.75 (0.56-1.01)	0.08
Care Delivery System			
Provider availability			
Weekend hours	0.19**	1.08 (0.86-1.36)	-0.16*
Weekday evening hours (after 5pm)	0.06	1.33 (1.06-1.66)*	0.02
Care coordination			
Referrals to dentists from child's pediatrician	0.08	1.62 (0.81-3.22)	-0.19**
Sending a reminder for next appointment	0.05	1.77 (1.02-3.09)*	-0.04
Convenience in accessing care			
Total minutes needed to get your child to the dentist office	0.05	1.01 (0.99-1.26)	-0.11*
Wait more than 30 minutes in the clinic	-0.12	0.66 (0.38-1.13)	-0.004
Dentist close to where to live	-0.12	0.56 (0.30-1.04)	0.10
Importance of dentist to be close	-0.09	0.99 (0.67-1.47)	0.04

* p < 0.05

** p < 0.01

The mother's belief in the importance visiting a dentist to keep the child's teeth healthy and the importance of dentist visits during the child's preschool years, and the beliefs of the mother and her social network concerning seeing the dentist at an early age were all related to younger age at first dental visit. Receiving a dentist referral from the child's pediatrician, dentist office hours on weekends, and short travel time to the clinic were also significantly correlated with seeing a dentist at a younger age.

Multivariate analysis results. The variables with significant correlations with the dependent variables ($p < 0.05$) in the bivariate analysis were entered into the regression analysis. It was not the mother's attitudes but provider availability, dental insurance (including Medicaid) and family income that were related to frequency of planned visits. The general linear model (GLM) was used to learn the effects of the interactions of maternal education with these maternal attitude factors; the interactions were not significantly related to the frequency of planned visits. Having dental insurance (beta coefficient = 0.16, $p = 0.025$) and lower family income (beta coefficient = -0.15, $p = 0.032$), and provider availability on weekends were among enabling factors associated with more planned dentist visits (Table 4).

Mothers with a belief in the importance of preventive dental care were about four times more likely to continue dental care than the mothers who did not cite preventive care as a reason for a dental visit (OR = 3.48, 95% CI = 1.29–9.39). Provider availability in the evenings increased the likelihood of the mother's return to the same dentist to continue her child's care (OR = 1.66, 95% CI = 1.16–2.38).

The four regression models were used to test the significance of predictors of child's age at first dental visit (Table 5). In the first model, the mother took the child to a dentist at a younger age if the mother and members of her social network believed the child should see the dentist at an early age and if her reason for dentist visits was preventive. When the mother's education level was added in Model 2, the significance of independent variables did not change. Length of residence in the U.S. and acculturation were mediating variables. Likewise, when length of U.S. residence was added in model 3 and acculturation level was added in model 4, only the mother's beliefs in the importance of making the child's first visit at a young age and her beliefs in the importance of dental visits to keep the teeth healthy were related to age of first visit. The beliefs of members of the mother's social network were no longer significant.

Discussion

Previous studies have found that socioeconomic status and acculturation were predictive of health service use.^{2,7,19} Therefore, this study examined factors within one such social stratum to identify the factors that affected Hispanic families of relatively low socioeconomic status and relatively low degrees of acculturation. In this urban, low-income Hispanic sample, length of residence in the U.S., degree of acculturation, and maternal education were not significant predictors of frequency of planned dental visits and continuity of care. Instead, different factors were related to each type of dental service use. Initiation and continuity of care were associated with non-financial factors.

Of the factors concerning the health care delivery system (waiting time, distance to travel to the dentist, and care coordination) it was provider availability (specifically, extended office hours) that was a significant predictor of regular, planned dental visits and continuity of care. An available, affordable health service delivery system was essential to making possible regular planned care and health service use. The health care professionals in this community must be made aware that extended clinic hours are essential to improving access to care in these communities of low-income working people.

Table 4.**MULTIVARIATE ANALYSIS FOR PREDICTING FREQUENCY OF PLANNED DENTIST VISITS AND CONTINUITY OF DENTAL CARE**

Factors	Outcome measures			
	Frequency of Planned Visits ^a		Continuity of Dental Care ^b	
	Standardized β Coefficient	p-value	Odds ratios	95% CI
Mother's attitudes toward dental care				
Importance of dental visits during child's preschool years			1.14	0.42-2.65
Dentist visits keep child's teeth healthy			3.48*	1.29-9.39
Dentist's visits without child's being frightened /uncontrolled			1.30	0.84-2.03
Social network's beliefs				
Importance of taking child to dentist on regular basis	0.11	p=0.109		
Financial barriers				
Family income	-0.15 **	p=0.032	0.81	0.55-1.20
Dental insurance	0.16 **	p=0.025		
Cost of dental care has prevented taking child to dentist			0.73	0.45-1.15
Provider availability				
Dentist office open weekday evenings			1.66 *	1.16-2.38
Dentist office open weekends	0.15 **	p=0.038		
Care coordination				
Sending a reminder card for next appointment			0.68	0.27-1.68

^aMultiple Regression Model: $F=5.26$ ($p=0.001$)

^bMultiple Logistic Model

* $p<0.05$

** $p<0.01$

It was the mother's beliefs in the importance of preventive care and age at first dental visit that predicted initiation of care at a young age. Many Hispanic mothers in this population (47%) believed in the importance of preventive dental care; those with such a belief were more likely to seek and continue care. Maternal beliefs in the importance of preventive oral health were seen to have strong effects. Primary care and dental care providers have an important role to play in preventive education regarding children's dental and oral development, injury prevention, and oral hygiene.

The mothers with dental insurance from Medicaid (and therefore with lower incomes) were more likely than others to plan regular dentist visits for their children.

Table 5.

MULTIVARIATE ANALYSIS FOR PREDICTING INITIATION OF CHILD DENTAL CARE

	Initiation of Dental Care (Child's Age at First Dental Care)			
	Model 1	Model 2	Model 3	Model 4
	β Coefficient		(p-value)	
Socio-demographics characteristics				
Education level		-0.03 (p=0.649)		
Length of U.S. residence			-0.10 (p=0.148)	
Acculturation				-0.04 (p=0.539)
Mother's attitudes toward dental care				
Importance of dental visits during child's preschool years	-0.12 (p=0.052)	-0.13 (p=0.051)	-0.006 (p=0.926)	-0.13 (p=0.05)
Belief in child's age at first visit	0.23** (p=0.001)	0.23** (p=0.001)	0.28** (p=0.001)	0.22** (p=0.001)
Regular visits keep child's teeth healthy	-0.37** (p=0.001)	-0.36** (p=0.001)	-0.41* (p=0.01)	0.38** (p=0.001)
Financial barriers				
Dental insurance	-0.06 (p=0.382)	-0.06 (p=0.400)	-0.06 (p=0.423)	-0.05 (p=0.473)
Cost burden of dental care	0.09 (p=0.152)	0.09 (p=0.151)	0.05 (p=0.459)	0.13 (p=0.05)
Convenience in accessing care				
Total minutes needed to get your child to the dentist office	-0.03 (p=0.635)	-0.03 (p=0.633)	-0.21 (p=0.759)	-0.05 (p=0.416)
Provider availability				
Weekend hours	-0.08 (p=0.188)	-0.08 (p=0.215)	-0.04 (p=0.532)	-0.06 (p=0.367)
Care coordination				
Referral from child's pediatrician	-0.05 (p=0.413)	-0.06 (p=0.384)	-0.06 (p=0.385)	-0.02 (p=0.764)
Social network's beliefs				
Belief in child's age at first visit	0.14* (p=0.035)	0.14* (p=0.039)	0.09 (p=0.208)	0.13 (p=0.053)
F-statistics***	F=11.82	F=10.52	F=9.18	F=10.29
Adjusted R ²	R ² =0.37	R ² =0.37	R ² =0.38	R ² =0.37

* p<0.05

** p<0.01

*** The F-values measure a goodness of fit and the strength of the regression in the regression models.

Of the respondents, over 80% were from working poor families and 68% of the children with dental insurance were covered by Medicaid. It is believed that, while the majority of these children are eligible for Medicaid/State Childrens Health Insurance Program (SCHIP) because of their parents' incomes, many of them were not enrolled in the program.

A major challenge facing Medicaid and SCHIP programs today is how to reach out to children who are eligible but who remain uninsured. According to a study concerning Medicaid enrollment, about 30% of parents cite the fact that their child's present doctor does not take Medicaid as an important reason for not enrolling.²⁰ Other factors that are significantly likely to affect decisions about enrolling include the mistaken belief that one has to be on welfare to get Medicaid.²⁰ For the immigrant population, such as the Hispanic mothers assessed in this study, immigration status as well as the unavailability of enrollment information in the person's primary language are also barriers to enrollment.^{20,21}

The Balanced Budget Act of 1997 (BBA) is having a profound effect on the Medicaid program. While the BBA enabled states to provide coverage for uninsured children through an expansion of their Medicaid program, the BBA makes clear the provisions and limitations of Medicaid regarding cost sharing.^{22,23} A previous study documented high out-of-pocket costs for Medicaid reduce the participation rate of otherwise uninsured low-income families.²³ Under separate SCHIP Programs, states have considerable flexibility to design benefit packages, so long as the package meets specified minimum criteria. While the SCHIP offers an important opportunity to states to reduce the number of low-income children who lack health insurance, states will only achieve this if they provide comprehensive benefit packages and limit out-of-pocket costs.

We found that many children had not received dental referrals from their pediatricians. The low referral rate (22%) might be related to pediatricians' roles and involvement in the prevention and assessment for oral health. Medicaid's Early Periodic Screening Diagnosis and Treatment (EPSDT) program is intended to provide regular dental screenings and appropriate treatment, but has apparently played only a limited role in improving access to dental care for poor children. According to a report by the Office of the Inspector General of the Department of Health and Human Services, only 20% of children under 21 years of age who were enrolled in Medicaid and eligible for EPSDT actually received preventive dental services.²⁴ Future research should focus on difficulties pediatricians encounter when referring patients with Medicaid for professional dental care and whether they would be willing to take on additional activities in order to improve children's oral health.

As shown in this study, financial resources, such as dental insurance, are not the only variables associated to access to dental care. Convenient clinic hours and an individual's or a family's health beliefs are important social and psychological factors identified in this study and should be considered in planning dental care programs among particularly vulnerable populations (such as Hispanic children). It is necessary that additional variables, such as the effect of community resources (e.g., dentist-to-population ratio; availability of dentists accepting Medicaid) on use of dental services be explored in future research. As indicated in *Healthy People 2010*,

the Hispanic population suffers disparities with respect to the majority ethnic group in the U.S. in oral health outcomes.¹⁰ Improving access to and early use of care are important steps towards reducing the disparities in oral health.

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