The Intersection of Place, Working Parents and Food Assistance: Implications for Preventing Child and Adolescent Obesity

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Abstract

Background/Purpose: The cumulative effects of the environment, educational system, and social injustices contribute to child health disparities. Collectively, these factors create barriers to national efforts aimed at reducing childhood obesity. Thus, behavioral, social, and cultural contributing factors were examined. **Methods:** Parents and guardians of Texas (n=714) children were interviewed by telephone using the National Survey of Children's Health (NSCH). Weight status and variables of interest were analyzed using logistic regression. **Results:** Based on parental response, Hispanic children were more likely to be overweight/obese (p =0.002). Child recipients of food stamps had higher obesity rates (p-=0.011). Parents with less than a high school education had significantly more overweight/obese children (50% and 56% respectively, p <0.001). Children who did not have at least one parent employed were more often obese/overweight (p <0.001). Uninsured children (p =0.014), uninsured in past 12 months (p =0.032) and public insurance use (p < 0.001) were more likely to be obese/overweight. **Conclusion:** Ethnicity, low-income, education, unemployment and food stamp use are associated with increased risk for obesity. Intervention programs for low income families should be guided by social ecology and family system theories to facilitate changes in the home environment to support healthier lifestyles.

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Introduction

Childhood obesity in the United States is an epidemic and has become a major public health concern (Centers for Disease Control and Prevention [CDC], 2015). The study focused on Texas children and adolescents where the disproportionate burden of obesity among African-American and Hispanics, primarily Mexican-Americans continues to be a concern for public health professionals. Obesity among Texas adolescents exceeds the national rate (15.6%, 13.7%, respectively) (CDC, 2015). At the same time, Texas children living in poverty (25%) also exceeds the national rate (22%) (AECF, 2015). Texas is considered the second most food insecure state and has the highest number of food deserts (Manon & Giang, 2010).

In 2010, Manaon & Giang reported that Texas also had the lowest number of supermarkets per capita of any state in the country.

Despite national goals set forth by Healthy People 2020 to eliminate health disparities and to reduce the proportion of children and adolescents who are overweight or obese (US Department of Health and Human Services [HHS], 2014); obesity remains prevalent. Poor eating habits and lack of physical activity have long been known to contribute to the obesity epidemic; however, in recent years, obesity research has focused on the health disparities among specific racial/ethnic and socioeconomic groups (Braveman & Egerter, 2013; Mehtaa, Lee & Ylitalo, 2013). An entire industry emerged focused on eliminating health

disparities to achieve health equity (Bravemen, 2009; Shaw-Ridley & Ridley, 2010). Health disparities have been defined as a "health difference that is closely linked to social, economic and/or environmental disadvantage" (HHS, 2014, para 1).

consistently demonstrates Research the disproportionate rates of overweight, obesity and chronic illnesses, among Latino and African-American children and adolescents (CDC, 2015: Robert Wood Johnson Foundation [RWJF], 2010). Although ethnicity is often linked to obesity and chronic illness, it does not solely predict poor health. Ethnicity is simply the predictor, expressing the social, proxy economic, education, and political underpinnings that are really the predictors of poor health (Braveman & Egerter, 2013). Multiple social determinants of health create unequal opportunities for proper growth and development for children and adolescents. Many of these determinants go beyond the child and/or adolescent individual behavioral factors, such as poor eating habits and lack of physical activity. Instead, many habits are an established part of the home and neighborhood culture, cultivated by the adults in charge of the family household (Braveman & Egerter, 2013; Egerter, Braveman, Sadegh-Nobari, Grossman-Kahn & Dekker, 2009).

Low-Income Family Households

Parental education, employment status and income are social determinants of health that can impact child weight status, but are often minimized as modifiable factors that can lead to improvements in child and adolescent health (Braveman & Egerter, 2013). Education, employment status and income are important because they can provide more equitable opportunities for safe and affordable housing, better schools, access to healthy foods, parks, sidewalks and healthcare (HHS, Neighborhoods that lack parks and walking paths discourage physical activity (Bors & 2014). More importantly, Powell. neighborhoods may limit the development of positive social capital (how people feel and what they do). A primary contributor to health

disparities is the lack of access to healthy food options (Treuhaft & Karpyn, 2010).

Families living in a low-income neighborhood often have greater access to convenience or corner stores, which offer unhealthy food options. The lack of access to affordable, fresh, high-quality foods increases the risk of chronic disease (Braveman & Egerter, 2013; Treuhaft & Karpyn, 2010). Not only does a lack of quality food retailers negatively impact health; it can also impede economic development impoverished neighborhoods (Treuhaft Karpyn, 2010). Purchasing power is severely diminished because of low paying jobs that often characterize families residing in economically challenged households.

According to the US Department of Education (2015) in 2012, Hispanics had the highest high school dropout rate (12.7%), followed by Blacks (7.5%) and Whites (4.3%). Young adults that dropout of high school are at greater risk of living in poverty, often receive government assistance and have poorer health (Child Trends Data Bank, 2014). Poor education and/or lack of education can lead to low income for a household. In 2009, the median household income was particularly low for Blacks (\$33,982) and Latinos (\$38,980) as opposed to Whites (\$64,566) (Annie E. Casey Foundation [AECF], 2011). Low income households are more likely to be obese, have family members with a chronic illness, and are at greater risk for other types of health problems. Trevino et al. (2008) reported that fourth-grade students from low-income (< \$20,400/year) households consumed poor quality diets and were at greater risk for obesity and type 2 diabetes.

Food Insecure Households and Obesity

Parents with low education levels who are unemployed or who have low-paying jobs can have difficulty accessing affordable healthy food options. Over 15.3 million American children are believed to live in food insecure households (Feeding America, 2015). Hispanic (26.9%) and Black households (24.9%) have substantially higher rates of food insecurity than the national average of 14.7% (Nord, Coleman-Jensen, Andrews & Carlson, 2010). Highest periods of

food insecurity are most often reported toward the end of the food stamp cycle, when food supplies are lower and even more inadequate in lower-income households (Dinour, Bergen & Yeh, 2007). Some researchers have implied that food insecurity can contribute to weight gain due to the consumption of poor quality and inexpensive foods, which tend to be higher in calories and lower in nutrients (Casey et al., 2006; Holben, 2006; Larson & Story, 2010).

The Supplemental Nutrition Assistance Program

The Supplemental Nutrition Assistance Program (SNAP) provides a safe and nutritious food supply to children and youth who are at risk for poor nutrition intake (Stang & Bayerl, 2010). Despite the secured benefits that federal food assistance programs can provide for children, adolescents and families, there are some concerns that the lack of nutrition education and the ability to purchase healthier foods on a limited budget can lead to unhealthy eating that might contribute to weight gain. Zagorsky and Smith (2009)noted that women who participated in the food stamp assistance program had a higher BMI than women who were not enrolled in the food stamp program. However, researchers report opposite findings for children and adolescents who participate in SNAP. Ver Ploegm, Mancino, Lin, and Guthrie (2008) utilized data from the National Health and Nutrition Examination Surveys (NHANES) from 1976-2002 and concluded that there was no evidence of a consistent relationship between childhood obesity and federal food assistance programs, such as SNAP. In a similar study by Leung et al. (2013), SNAP participation was not associated with a higher risk of obesity; however, findings concluded that participants consumed high processed foods, sugarsweetened beverages, sodium and saturated fat. Children and adolescents who live in family households that are characterized by food insecurity are also likely to lack health insurance resulting in missed opportunities for nutrition and health screening services, education and counseling (Stang & Bayerl, 2010).

Uninsured Children, Well-Child Visits and Low-Income Households

According to the American Academy of Pediatrics (2015), well-child visits help monitor children's overall health. provide immunizations, and offer an opportunity for parents to receive nutritional guidance. Wellchild checks are important to maintain health and prevent chronic diseases (HHS, 2011). Unfortunately, one in ten children are uninsured and do not have access to preventative health care (Institute of Medicine [IOM], 2009). Children in low-income households are often uninsured or underinsured and have a greater risk for poor health and chronic illness (IOM, 2009). Low income Hispanic children were less likely to receive a well-child check than children from other racial/ethnic groups (Child Trends DataBank, 2014).

Data from the Medical Expenditure Panel Survey (2001–2003) revealed that children who live in low-income households were more likely to have had a least one preventative care visit if they had public insurance rather than private insurance, or were partly or fully uninsured for a year (Perry & Kenney, 2007). Additionally, children of parents with less than a high school degree were less likely to receive a well-child check than their counterparts with a bachelor degree or more (79%, 92%, respectively) (Child Trends DataBank, 2014).

Obesity and overweight disparities resulting from lack of physical activity, limited access to healthy foods, low income households, inadequate job opportunities, lack of health insurance, and access to preventative and/or curative health care can have a cumulative effect on the overall quality of life for children, adolescents, and their families. Moreover, the interaction of these determinants can stimulate a cycle of poor behavior choices grounded in values prioritizing, and decision-making. The childhood obesity epidemic represents a complex phenomenon that still has many unanswered questions about the relational interplay between parental education levels, employment status income level, preventive care visits, health insurance coverage, family health behaviors and obesity. This paper examines the

intersection of selected demographic variables and poverty indicators as significant predictors of obesity in Texas minority children.

Methods

Participants

A total of 714 parent/guardian respondents met study requirements by providing their child's height, weight (allowing the calculation of body mass index BMI) and responses for all primary study variables. The minimum age for inclusion of the study was 10 years. Child participants were excluded from the study if they did not meet the age requirement or did not have height and weight information recorded.

Study Procedure

The study used population-based cross-sectional data derived from the 2007 National Survey of Children's Health (NSCH) to identify factors that contribute to obesity in children living across the state of Texas. The nationally representative data from the NSCH was collected by telephone interviews of the parents/guardians of 91,642 children aged 3-17 living in households across the United States. The dataset was based on 1.725-1.932 interviews in each state. The total number of cases completed from Texas numbered 1,805. Telephone numbers were called at random with the goal of identifying households with one or more children less than 18 years of age. In each household, one child was randomly selected as the subject of the interview. Results were weighted to represent the population of noninstitutionalized children ages 0-17 across the nation and in each state. The NSCH was conducted in both English and Spanish by the National Opinion Research Center (NORC) at the University of Chicago between April 2007 and July 2008. The secondary data analyses presented in this study was approved by the Texas Women's University IRB.

Measures

The NORC's survey, the NSCH, included a total of 100 self-reported items, but only a subset of the items was used in this study, including those pertaining to poverty, neighborhoods and environments, body mass index (BMI), and demographic variables. The selected NSCH demographic variables used in this study included gender, age, ethnicity, level of mothers' education, level of fathers' education, healthcare and whether or not at least one parent in the household was employed full time. Table 1 displays a sample of the questions used in the survey.

Data Analysis

The calculated BMI variable was categorized based on the CDC BMI growth chart (CDC, 2015). Chi square test was used for uni-variate analysis. Continuous variables were tested for normality using the Kolmogorov-Smirnov test of normality. Relationships among continuous variables were examined using Pearson's product moment correlations. A set of preliminary backward stepwise multiple linear regressions were conducted with calculations. The statistically significant predictors were then entered into multivariate logistic regression models with categorized BMI as the outcome of interest. Children and adolescents with >85th percentile BMI were categorized as overweight and obese while those <85th percentile were classified as nonoverweight/obese. P values less than 0.05 were considered statistically significant. Odds ratio and 95% confidence interval (95% CI) were noted. Statistical analyses were performed using Statistical Package for Social Science (SPSS) for Windows, Version 19.0 (IBM, Chicago, IL, USA).

Table 1.Sample Questions from National Children's Health Survey 2007

Category Questions				
Demographics	Is [CHILD'S NAME] of Hispanic or Latino origin?			
2 cmog.upmeo	• Is [CHILD'S NAME] White, Black or African American,			
	American Indian, Alaska Native, Asian, or Native Hawaiian, or other Pacific Islander?			
Parental Education Level	 What is the highest grade or year of school (you have/[CHILD'S NAME]'s [MOTHER TYPE] has) completed? 			
Household Employment Status	 Was anyone in the household employed at least 50 weeks out of the 52 weeks? At any time during the past 12 months, even for one month, did anyone in this household receive any cash assistance from a state or a county welfare program? 			
Food Assistance	 During the past 12 months, did ([CHILD'S NAME]/any child in the household) receive Food Stamps? During the past 12 months, did ([CHILD'S NAME]/any child in the household) receive free or reduced-cost breakfasts or lunches at school? 			
Neighborhood/Community Characteristics	Please tell me if the following places and things are available to children in your neighborhood, even if [CHILD'S NAME] does not actually use them:			
	• Sidewalks or walking paths?			
	 A park or playground area? 			
	 A recreation center, community center, or boys' or girls' club? 			
	 A library or bookmobile? 			
	 In your neighborhood, is there litter or garbage on the street or sidewalk? 			
	 How about poorly kept or dilapidated housing? 			
	 How about vandalism such as broken windows or graffiti? 			
	Now, for the next four questions, I am going to ask you how much you agree or disagree with each of these statements about your			
	neighborhood or community:			
	 "People in my neighborhood help each other out." "We watch out for each other's children in this			
	neighborhood."			
	 "There are people I can count on in this neighborhood." "If my child were outside playing and got hurt or scared, there are adults nearby who I trust to help my child." 			
	 How often do you feel [CHILD'S NAME] is safe in your community or neighborhood? 			

Results

Sample Demographics

Table 2 displays the descriptive analysis of demographics and survey variables from a total parent/guardians that reported information about their child. The mean age was 14 years (SD = 2.24, range = 10 - 17). There was a slightly higher proportion of males (52.7%) than females (47.1%) and a higher portion of Hispanic (44.5%), followed closely by Caucasian (38.4%), with fewer African-American (11.2%) and multi/other, non-Hispanic children (5.5%). Approximately 12% of mothers and 10% of fathers, who responded had less than a high school education. While the majority (91%) of children in the study did have

at least one of their parents employed full time, 9% did not. Nearly 32% of the children participated in the national free or reduced school meal program and 12% received food stamps. More than 13% of the parents/guardians described their home environment as "poorly kept housing", while 18% and 38% stated no access to sidewalks and recreation center respectively. Almost 16% of children had no access to a park or play grounds. Over 30% of the children were described as overweight or obese. The findings of this study do closely represent the demographics, characteristics, and socioeconomic factors of the larger population in Texas. Thus, Texas minority children who live in a low-income family household may be at greater risk for obesity and chronic disease.

 Table 2.

 Descriptive Analysis of Demographics and Survey Variables

	Characteristics	n	%
Gender	Male	376	52.7
	Female	336	47.1
Ethnicity	Hispanic	318	44.5
	Caucasian	274	38.4
	African American	80	11.2
	Multi/Other, Non-Hispanic	39	5.5
Mother's Education	Less than High School	86	12
	High School	138	19.3
	More than High School	439	61.5
Father's Education	Less than High School	68	9.5
	High School	83	11.6
	More than High School	380	53.2
At Least One Parent Employed Full Time	Yes	651	91.2
BMI Classification	Not Overweight/Obese	494	69.2
	Overweight/Obese	220	30.8
Cash Assistance	Yes	14	1.9
Food Stamps	Yes	88	12.3
Reduced Cost/Free School Meals	Yes	225	31.5
Recreation Center	Yes	441	61.7
Sidewalks	Yes	583	81.6
Poorly Kept Housing	Yes	92	12.8
Parks or Playgrounds	Yes	598	83.7

Variables of Interest by Child Weight Status

Stratified analysis in Table 3 indicated that the proportion of ethnicities differed significantly by BMI status, with Hispanic children being more overweight/obese (63%, p-value < 0.001). Mothers and fathers with less than high school education were more likely to have overweight/obese children (50% and 56% respectively, p <0.001). More Hispanic mothers and fathers (24.5% and 25.6%, respectively, pvalue < .001) had less than a high school education. Children who did not have at least parent employed were obese/overweight (53%, p <0.001). Children whose parents had cash assistance were significantly more obese (57%, p =0.031); similarly, children recipients of food stamps were more often obese (55%, p <0.001). Fifty percent of children with reduced cost/free school meal were obese/overweight (p-value<0.001). Obesity status also varied significantly by child's health insurance; those without health insurance (41%, p = 0.014), uninsured in past 12 months (38%, p = 0.032) and those with public insurance (42%, p < 0.001) were more likely to be obese/overweight. There was no significant relationship between obesity status and the presence of recreation centers, sidewalks, poorly kept houses, parks, or playgrounds in the neighborhood.

The multivariate logistic regression indicated that Hispanic ethnicity, age, food stamps, place of health care, and hospital for healthcare were independent predictors of childhood obesity. Hispanic children were more likely to be overweight/obese (OR=1.96, p =0.002) as compared to Caucasians. Children receiving food stamps were more likely obese (OR=1.89, p =0.011). When compared to doctor's office visit, children who visit other places, such as a clinic (OR=2.79, p =0.002) and those who visit a hospital (OR=2.32, p =0.041) for regular healthcare were more likely to be obese.

Discussion

Child and adolescent obesity is a complex and multifaceted phenomenon. Our study confirms findings of earlier studies that showed ethnicity, employment and income to be predictive of

obesity (May, Freedman, Sherry & Blanck, 2013; Braveman & Egerter, 2013). Study findings may also suggest that the place (neighborhood) where families reside is determined by income level, employment status, and education level. The interaction of these three determinants often shapes the family need for food assistance which might be a better predictor for obesity (Bravemen, 2009; HHS, 2014; Pollack, 2008). Though studies have not shown a link between high BMI and participation in the SNAP program, (Leung et al., 2013; Ver Ploeg & Ralston, 2008), results from the current study did suggest that participants receiving food stamps were more likely to be overweight. One explanation could be that consumed foods might have higher calories and provide few nutrients (Johnson, Mander, Jones, Emmett, & Jebb, 2008; Reedy & Krebs-Smith, 2010). Additionally, children receiving food stamps may overeat when there is a food surplus (Casey et al., 2006; Holben, 2006; Larson & Story, 2010).

Parents, who have low education levels and lack employment may not have the resources needed to provide optimal home environments for their children, often reside in low-income neighborhoods, may have increased exposure to contaminants that can affect the overall health of the adult family members and the children (Egerter et al., 2009).

In our Texan sample, Hispanic mothers and fathers more often had less than a high school education when compared with Caucasian and African American mothers and fathers. Fry (2010) reported similar findings with Hispanic adults (41%) being more likely to have less than a high school education compared with Caucasian (14%) and African American (23%) adults. Higher adult educational attainment has been associated with many positive family outcomes that include better employment, health insurance and higher life expectancy (Egerter et al., 2009; United States Department of Education, 2015). In this study, mother's and father's with less than high school education had significantly more overweight/obese children. Children who did not have at least one parent employed were more obese/overweight.

Table 3.

Univariate	Analysis	of Predictors	bv BMI	Classification
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Predictor Variables		Not Overweight/ Obese		Overweight/ Obese			
110010101		n	%	n	%	χ^2	p
Ethnicity	Hispanic Caucasian	186 224	58.49 81.75	132 50	41.51 18.25	37.97	<
Mother's Education	African American	51	63.75	29	36.25	37.57	.001
	Less than High School High School	43 93	50 67.39	43 45	50 32.61	20.47	<
	More than High School	326	74.26	113	25.74	20.47	.001
Father's Education	Less than High School High School More than High School	30 55 301	44.12 66.27 79.21	38 28 79	55.88 33.73 20.79	37.83	< .001
At Least One Parent Employed Full Time	Yes	464	71.27	187	28.73	15.93	< .001
Cash Assistance	Yes	6	42.86	8	57.14	4.64	0.031
Food Stamps	Yes	40	45.45	48	54.55	26.52	< .001
Reduced Cost/Free School Meals	Yes	112	49.78	113	50.22	58.06	< .001
Recreation Center	Yes	311	70.52	130	29.48	0.96	0.327
Sidewalks	Yes	410	70.33	173	29.67	1.93	0.165
Poorly Kept Housing	Yes	60	65.22	32	34.78	0.78	0.377
Parks or Playgrounds	Yes	413	69.06	185	30.94	0.03	0.87
Does the Child Have Health Insurance?	Yes	434	70.92	178	29.08	6	0.014
Consistency of Insurance Coverage During Past 12 Months	Currently Uninsured/Periods No Coverage During Year	97	62.18	59	37.82	4.6	0.032
	Consistently Insured Throughout Past Year	397	71.15	161	28.85		
Type of Insurance Coverage	Currently Uninsured Public Insurance (i.e.	60	58.82	42	41.18		
	Medicaid or SCHIP)	91	57.59	67	42.41	23.72	.001
	Private Health Insurance	343	75.55	111	24.45		
Place of Health Care	Other/Not One Place Most Often	19	41.3	27	58.7		
	Clinic or Health Center Hospital Emergency Room	79	62.2	48	37.8	31.22	< .001
	or Outpatient	14	50	14	50		.001
	Doctor's Office	382	74.46	131	25.54		
Delayed/Not Received Health Care	Yes	453	69.27	201	30.73	0.02	0.881

Parental work hours have also been associated with overweight (Anderson, Butcher & Levine, 2003). The study findings suggest that ethnicity, parental education and employment are interrelated, signaling that further research may be necessary to distinguish the effects of ethnicity from those of parental education/employment on child obesity.

In the U.S. race/ethnicity has consistently been the basis for discrimination in housing. education, employment, income, and economic opportunity (Pollack, Egerter, Sadegh-Nobari, Dekker & Braveman, 2008); Woods, Shaw-Ridley, & Woods, 2014). Low income breeds low-income neighborhoods with performing schools, high drop-out rates, and students entering vocational professional training programs, attending and graduating college, and being able to support families (AECF, 2015; Braveman & Egerter, 2013).

These findings shed light on the compounding influence of gaps in parental education, levels of employment, and income between the ethnic groups. Regardless of ethnicity, socioeconomic factors, such as existing on low-incomes and having low education status, can negatively affect health at all ages, starting with premature births and low-birth weight babies (Amarasinghe & D'Souza, 2012; Egerter et. al, 2011).

Longitudinal studies are necessary to further understand the impact of improving parent education levels, employment status, and income on childhood obesity. Intervention research and programs can build from the existing knowledge base to change the landscape that determines both parent and child education levels for ethic minority families.

Limitations

This study had several limitations. Data were limited to parents and guardians in Texas who had household access to a phone and who were randomly selected to participate in the survey. In addition, the survey was only completed by parents and guardians who agreed to participate and, as such, participants may represent a more motivated subset of the population. Only self-

reported data about children's height and weight was collected. Survey questions were limited by study protocol and did not ask parents and their families' guardians about beliefs, traditions, or cultural practices regarding body image, healthy lifestyle and food practices, all of which could influence the context for interpreting the results. Survey questions did not ask the participants about physical elements of their built environments that support active and healthy lifestyles, such as access to fresh fruits and vegetables (community gardens, mobile markets, farmers' markets, full service grocery stores.

Implications for Practice

Health promotion professionals and practitioners serve as change agents and connectors that gap between families bridge the neighborhoods. It is imperative that we understand family functioning of low-income households in our national efforts to develop responsive and sustainable interventions to support healthier living through family capital improvements. Family capital includes what the family feels and what they do. The feelings and what they do are probably modifiable only after education, income, housing, and economic opportunities are available, accessible and equitable (Pollack et al., 2008). Though good efforts have been made to address the health of children living in lowincome families, many of the current familybased programs are focused on individual level behaviors (i.e. healthy eating and physical activity). Health professionals develop change interventions individual behavior because population health strategies are more complicated and must address multiple levels of influence on parent child, adolescent, and family functioning. Altering one level of influence on health requires that another level be changed in order to have a positive and sustainable impact on health outcomes.

Nonetheless, the vast body of scientific evidence employs us to design and implement multilevel interventions to address the interplay between place, working parents, and the need for food assistance, if we expect to make sustainable gains in reducing childhood obesity disparities among racial/ethnic minority families and their children. (Amarasinghe & S'Souza, 2012; Sallis & Owen, as cited in Glanz, Rimer & Viswanath, 2015). Population health studies using multilevel approaches have been successful in obesity prevention-related initiatives as well as for tobacco use, seat belt, recycling and diabetes self-management (Gooze, Hughes, Finkelstein & Whitaker, 2010; Huang, Drewnowski, Kumanyika, & Glass, 2009; Sallis & Owen, as cited in Glanz, Rimer & Viswanath, 2015).

study confirms the urgency collaborative partnerships among public and private sectors invested in (a) increasing education and job training opportunities for heads of low-income households; (b) workforce development; and (c) improving housing and environmental conditions in the places where families live, work, and play. Health promotion researchers and practitioners must create sustainable partnerships with key stakeholders that include: 1) the families most affected 2) local and state health departments 3) community organizations 4) physicians and health professionals 5) academic institutions 6) workforce institutions 8) housing entities 7) nonprofit organizations 8) faith-based organizations and 9) promotoras or community health workers to stimulate local, state, and national policies that support functional families. When parents are gainfully employed, there is a greater chance that they will use preventative care resources that enable and nurture active, healthier lifestyles to reduce childhood obesity.

Conclusion

Children living in poverty, food insecurity, low income status, and low parent education levels among minorities in Texas describes the perfect storm for increased burdens of obesity among some of America's most left behind children (Trevino, 2009). Although national and state policies and legislation to reduce and prevent childhood obesity have recently improved, there is a sense of urgency to identify sustainable solutions to the problem of obesity. Solutions will certainly entail multilevel, coordinated approaches that promote linkages across several sectors in order to be sustainable. Reducing childhood obesity begins with families that have more than basic resources to meet the needs of their families. Parents of the most vulnerable children must have access to opportunities to generate wealth that can be passed from one generation to the next, ensuring that no children are forgotten. Healthier children will eventually from comprehensively emanate healthier families. The intersection of place, working parents, and food assistance represents a practical point of entry for population health based interventions to reduce obesity among Hispanic, poor, minority, and underserved children in Texas and other states with similar demographics. Reducing the childhood obesity epidemic is indeed a family affair!

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