Food Insecurity and Related Health Problems Among Children in Denton, Texas

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Bio:

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Abstract:

In order to be in good shape, one must have a good and healthy diet. The failure to eat healthy foods leads to poor health; therefore, understanding the causes and consequences of food insecurity and finding a solution are of great significance. The purpose of this project is to examine the geography of food-insecure households and estimate the health problems caused by food insecurity among children in Denton, Texas. The methodology includes, first, a thorough review of the literature from articles that answer these specific questions. The findings from reviewing different articles were that the principal cause of food insecurity was poverty. Also, people exposed with food insecurity have serious health issues such as depression and anxiety. Secondly, two staff members at two North Texas agencies that address the issues of food insecurity in Denton were interviewed about issues related to food insecurity in the region. The results of those two interviews are reported.

Introduction

Today, hunger is the major problem in the world. There are many families that go daily without enough to eat. Indeed, they have difficulties accessing food. This unfortunate situation affects poor families disproportionately. The failure to obtain and eat healthy foods is referred to as food insecurity. Current estimates are that 39 million people annually have food insecurity (Kushel, Gupta, Gee, & Haas, 2006). According to the Baylor Blueprint (First Choice Power, 2011), 90,090 Denton County residents are food insecure. This huge percentage definitely makes us aware of the gravity of the issue. That is why the focus of this research is on food insecurity. The purpose of this research is to describe the problem of food insecurity among children in Denton County and the work of nonprofit organizations to address the problem. The questions we will address in this research include (1) what are the causes of food insecurity, (2) what are the social consequences of the food insecurity situation, and (3) what are the possible approaches to fight against this problem.

Review of Literature

In order to examine the health problems related to food insecurity, the following sections will discuss the existing data about the causes and consequences of the food insecurity here in the United States.

Poverty

To be in good shape, one must have a good diet. As a result, one must eat healthy foods necessary for his or her body's development. The failure to eat these healthy foods may be caused by food insecurity in families. In the U.S., 39 million persons a year have food insecurity (Kushel, Gupta, Gee, & Haas, 2006). Indeed, food insecurity is the failure to have enough food to eat. It occurs when the person is unable to access enough healthy food. The research, done

first by Chilton and Rose (2009) and then by McCurdy, Gorman, and Metallinos-Katsaras (2010), concluded that the primary cause of food insecurity is poverty. As a result, these families had problems meeting their children's needs for food. In addition, financial problems prevented them from getting health care insurance and, therefore, these families also had difficulty getting health care. Kushel, Gupta, Gee, and Haas (2006) made a study of low-income Americans. They collected data on age, gender, income, ethnicity, education and health status of the persons interviewed. Their enabling factors were income, employment status, and health insurance. They found that 42.7% of the population had food insecurity. Most of them were uninsured and had difficulty accessing medical care. In their sample, 22.4 % people were Black, 17.9 % were Latinos, and 30.8 % were single-mothers (Cook & Frank, 2008). In addition, Sharkey, Dean, and Johnson (2011) conducted a research study on *colonias*. They noticed that the people with food insecurity were either unemployed or worked part-time. Coleman-Jensen, Nord, Andrews, and Carlson (2011) studied 54,000 houses and found out that 40.2 % of families with low-incomes were exposed to food insecurity.

Health

Five studies examined food insecurity's effects on health (Chilton & Rose, 2009, Cook & Frank, 2008; Kushel et al., 2006; McCurdy, et al., 2010; Sharkey, et al., 2011). Chilton and Rose (2009) found out that depression, stress, anxiety, underdeveloped births, a slow development in the child's growth, and underweight babies are at the most risk for food insecurity. In addition, Sharkey, et al. (2011) discovered that food insecurity causes poor academic performance, health issues, and retarded development in children.

In another way, the study done by McCurdy, et al. (2010) revealed that parental depression and overweight children are also consequences of food insecurity. They found that

children were overweight due to the parents' stress. This stress pushed the parents to buy to their children fast foods instead of cooking them healthy meals at home. Food insecurity affects a person psychosocially and biophysically. Indeed, it prevents the person from growing normally (Skalicky, Meyers, Adams, Yang, & Frank, 2006). In addition, the research done by Kushel et al. (2006) on low-income Americans described high percentages of obesity and hypoglycemia as effects of food insecurity.

Cook and Frank (2008) evaluated the food insecurity rates in the United States. Their results show that people who have food insecurity are more exposed to health issues from their birth to their older age. The food insecurity can lead to low-birth weight babies and slow development of the fetus due to the lack of iron and folic acid in the pregnant women's diet. Moreover, 31% of such children are hospitalized many times after birth.

Summary

It is apparent that poverty is the first and most fundamental cause of food insecurity. Low-income families have difficulty meeting their demands in terms of food. This upsetting fact is the consequences in terms of mental and physical health. It leads to stress, anxiety, obesity, a delayed development and many others.

Statistics on Food Insecurity in Texas

According to the 2010 Census, 654,263 children are food-insecure and 29.3% live below the federal poverty rate in Dallas. In Texas, 18.8 % of the population is food insecure compared to 14.6% in the US as a whole. Texas ranks seventh in the low-income population among the United States. According to Jeremy Everett (Ending Childhood Hunger, 2012) the main reason for food insecurity is the lack of plans to address the problem.

Programs Available to Fight Food Insecurity in North Texas

There are a number of programs available to children in school to fight hunger, such as the Kids Café, the backpack program, the summer food program, and the school pantry. The kids Cafe program is a program that gives free meals and snacks to children in churches and public schools. This program is available to these children during the whole school year. The backpack program is a program that ensures that children eat during the weekend. It consists of giving these children, at the end of the week, the necessary food that will help them survive throughout the weekend. The summer food program is available to children during the summer. Like the backpack program, it is to ensure that children eat while they are not attending school by providing to them with healthy meals, snacks and food packages. The school pantry is located in school and provides foods to the children during their school hours.

From the Hunger Conference we attended in Dallas on August 23, 2012, we learned that not every child participates into these programs. Out of 694,694 children eligible for breakfast, only 206,243 participated. There are three different types of breakfast models provided to the children at school: the hallway model, the classroom delivery and the grab and go model. The most successful one is the classroom delivery which is about 90% successful and the least successful one is the Grab and Go. Two of the possible reasons why the children are not participating are stigma and timing. Sixty-two Dallas schools are now involved in the breakfast program and there are about 11,008 meals available each day (Ending Childhood Hunger, 2012).

Methodology

My methodology consisted of interviews with staff members of two agencies: (1) the Denton Community Food Center and (2) the North Texas Food Bank, which provides food for the food programs in 13 DFW Metroplex counties, including Denton. The interview included questions about (1) types of food services offered to children; (2) health problems of the children, especially those issues related to food insecurity; (3) ages, school attendance, and health insurance of the children served; (4) the general family situation of the children served, including who they live with, whether or not the adults are employed, and their general financial status; (4) reasons for food insecurity by the family; and (5) problems with transportation for the family. Before the interview was be conducted, an informed consent form was signed by the staff to ensure that all the information provided by them stay confidential. In addition, it is entirely voluntary and the staff members were free to refuse to answer any questions posed to them to which they objected. Because the interviews were confidential, the names of the staff members will not be given. They will be referred to as NTFB Staffer and DCFC Staffer in the summaries below. There were no risks for this research. The research was approved by the Institutional Review Board at the University of North Texas in 2012.

Results from Interviews

North Texas Food Bank

In the interview with the staff member at the NTFB, I learned about the mission of NTFB and how the agency serves the North Texas region (NTFB Staffer, personal communication, September 28, 2012). The NTFB's mission is to eradicate hunger from the community. They work throughout 13 counties in the North Texas area. They receive food from donations, corporations, and contributions from private individuals. The NTFB serves all the people who are hungry and does not have any requirements for the people they serve in terms of residency, race, gender, or immigration status except that the families have to meet the requirement of the U.S. Department of Agriculture to have incomes below the poverty level. They work with the Tarrant County Food Bank and provide services to children in school. The "Kids' Café" is located in schools and the Boys and Girls Clubs. The goal is to provide a full meal to each kid

every day. This program serves about 5,000 children per day. Children in elementary schools are the focus of the programs. Kids Café serves children up to middle school. The Pantry serves elementary school children.

The Food for Kids program is also known popularly as the "backpack program." Children are given a backpack filled with dry foods to take home for the weekend. A nutritionist helps to plan the foods included so that they provide at least 50% of the calories that the children will need for the weekend. This is the most expensive program the NTFB participates in. On average 9,500 kids are served by the program but the program can only serve 1,200 kids per weekend. A third program is the school pantry program that is currently located in 5-6 schools. Kids can stop by the pantry and pick up a bag of boxed dry goods and produce to take home for after school. This program provides food to approximated 300-350 kids a day and as many as 2,000 per month. Unfortunately, some children do not benefit from these programs. "Some of the children go hungry. Some have reported eating rats," according to the staff member who was interviewed (NTFB Staffer, personal communication, September 28, 2012).

When asked about the family situation of the population they served, the answer by the staff person interviewed was:

NTFB does not collect data on the family situation of children but they do know that there are many children living in single parent homes although, in this down economy, partner agencies are seeing many more children from two parent families needing services. The parents may be out of a job through no fault of their own. The new face of

hunger is your neighbor. (NTFB Staffer, personal communication, September 28, 2012) The populations they serve need food stamps. The number one problem is the economy. People are out of work. They may have a house and a car and that counts against them when they apply for SNAP (Supplemental Nutritional Assistance Program). They may not be able to pay the mortgage on the house or buy gas for the car but it still counts against them. If they did not have the car they could not get to the store to get food and bring it home. They also could not get out to look for work.

SNAP is a big part of what we do. SNAP puts food on the table and it also puts money into our local economy through the grocery stores. Is it adequate? It depends. It is a great help to senior citizens. It is a good way to make our job easier. Texas has one of the worst, most inaccessible SNAP programs. At one point applications for SNAP were three months behind in getting benefits to the applicants. Imagine applying for SNAP and having to wait three months to get the food. People gave up. (NTFB Staffer, personal communication, September 28, 2012)

Agencies have worked with the state to streamline the process so it is more efficient now. The agencies have set goals for SNAP sign-ups like they have for distribution of food. SNAP supplements what the agencies can do in terms of food distribution.

Hunger creates health problems, including symptoms that mimic ADD (Attention Deficit Disorder). Students who are hungry are always complaining. Hunger leads to malnutrition that can hurt the children physically. When teachers identify children with behaviors associated with hunger, they refer them to the children's food programs. Ironically hunger can lead to obesity. For a couple of dollars, a hungry child can fill up on empty calories and fat at a fast food place. Children need good nutritional food, not junk. We need to help parents get a job and help them to get back on track. However, low income children are eligible for the SCHIP – State Children's Health Insurance Program. There is a cycle between health and healthy eating. Being hungry is bad for children's health. When asked about if the families have issues with transportation, the answer was:

Yes, families have problems with transportation. Bus service is not available throughout the service area. Desoto for example does not have bus service. There is a problem getting to the store to get food and then getting it home. There are "food deserts" in the service area, areas where there are no grocery stores. (NTFB Staffer, personal communication, September 28, 2012)

Denton Food Community Center

In the interview with the staffer at the Denton Community Food Center, I learned that DCFC is an agency that provides food to people in need (DCFC Staffer, personal communication, October 19, 2012). This agency serves as an emergency and temporary aid to people until they have a job or get back on their feet. It allows the families to come only four times a year and no more than once a month. However, they give them a reasonable amount of food to help them survive for a while. The agency does not have any food programs for children at school. To get registered, the family is interviewed by one of the staff and after that they get approved. Usually, the agency does not reject an application. Also, the agency has no requirements for people who are served. Anybody is welcome to get food there. DCFC prepares bags of food in advance ready to be taken by the family. The first bag weighs about twenty-five pounds and contains bread, canned foods, and some snacks. Secondly, the families get the meat they need from the freezer. There are also available foods for babies and toddlers. The people served by the DFCC have health related issues but no issues with transportation of which the staff member was aware.

DCFC works based on the principle, "We give what we are given to give" (DCFC Staffer, personal communication, October 19, 2012). They receive many food and money donations from good people. However, they prefer to receive money donations so they buy their own foods based on their nutritionist advice. They may buy their frozen foods from the retail stores at a discount or get them from Wal-Mart where frozen foods are given away for free when the food is past its sell date. A couple years ago, there were about seventy percent food donations and thirty percent money donations, but now it the reverse. Their main supplier is the Tarrant Food bank but they are working on increasing the food from the North Texas Food Bank.

Summary

The purpose of both agencies is to fight against hunger one way or another. The NTFB provides centralized food donations and distributes food to sites where the food can be distributed to individuals and families that need it, like the DCFC. In the interviews with staff members at the two organizations, the DCFC staffer reported that food insecurity has no health effect on people, while the staffer at the NTFB believed that food insecurity has major effects on population, especially on children.

Solutions to Food Insecurity

Some possible solutions to problems of food insecurity in North Texas are to increase access to healthy foods, support and encourage more communities, eliminate food deserts, encourage corner stores, offer more farmers' markets, increase participation of the communities, increase federal funds for nutrition services in the region, and maximize the ability of children to access breakfast (Ending Childhood Hunger, 2012). Also, we could increase the availability of food for families to access the food here in Denton with the DCFC.

We all need to get together and unite ourselves to fight against hunger. It is everybody's issue and with the help of one another, we could create more organizations and help the people in need. As the staffer at the NTFB said:

The government cannot do everything. Hunger cannot be solved by a few people doing a lot but by a lot of people doing a little. People can advocate for hunger. They can speak out against a farm bill in Congress to reduce food commodities available for hunger programs and thereby reduce food available for kids and for seniors. They can spend time volunteering in a food bank. (NTFB Staffer, personal communication, September 28, 2012)

Conclusions

Food insecurity refers to a household's having "limited or uncertain availability of food, or limited or uncertain ability to acquire acceptable foods in socially acceptable ways," as a result of inadequate financial resources (Skalicky, Meyers, Adams, Yang, & Frank, 2006). This situation affects the poor people more and causes them to have many health issues. As the NTFB staffer said, "Hunger is a terrible problem but it is solvable. There is food dying on the vine. Food is going into to garbage cans behind retail stores," (NTFB Staffer, personal communication, September 28, 2012). It is just a matter of good will because we need to wonder ourselves how we could sleep and live our lives while others are hungry and seeking just a small portion of food.

References

- Chilton, M., & Rose, D. (2009). A rights-based approach to food insecurity in the United States. *American Journal of Public Health, 99* (7), 1203-1211. doi:10.2105/AJPH.2007.130229
- Coleman-Jensen, A., Nord, N., Andrews, M., & Carlson, S. (2011). *Household Food Security in the United States in 2010*. U.S. Department of Agriculture, ERR-125, 1-29.
- Cook, J. T., & Frank, D. A. (2008). Food security, poverty, and human development in the United States. *Annals of the New York Academy of Sciences*, *1136*, 193-209. doi: 10.1196/annals.1425.001
- Ending Childhood Hunger: North Texas Food Insecurity Summit. (2012, August 23). Communities Foundation of Texas. Dallas, TX.
- First Choice Power, Texas Food Bank Network, Texas Hunger Initiative (September 2011.) Hunger by the Numbers: A Blueprint for Ending Hunger in Texas. PUCT REP Certification No. 100008. Waco, TX: Baylor University School of Social Work. Retrieved from https://bearspace.baylor.edu/Tariq_Thowfeek/public/blueprint.pdf
- Kushel, M. B., Gupta, R., Gee, L., & Haas, J. S. (2006). Housing instability and food insecurity as barriers to health care among low-income Americans. *Journal of General Internal Medicine*, 21(1), 71-77. doi: 10.1111/j.1525-1497.2005.00278.x
- McCurdy, K., Gorman, K. S., & Metallinos-Katsaras, E. (2010). From poverty to food insecurity and child overweight: A family stress approach. *Child Development Perspectives*, *4* (2), 144-151.doi: 10.1111/j.1750-8606.2010.00133.x
- Sharkey, J. R., Dean, W. R., & Johnson, C. M. (2011). Association of household and community characteristics with adult and child food insecurity among Mexican-origin households in

colonias along the Texas-Mexico Border. *International Journal for Equity in Health, 10* (1), 19-32. doi: 10.1186/1475-9276-10-19

Skalicky, A., Meyers, A. F., Adams, W. G., Yang, Z., Cook, J., & Frank, D. (2006). Child food insecurity and iron deficiency anemia in low-income infants and toddlers in the United States. *Maternal & Child Health Journal*, 10(2), 177-185. doi: 10.1007/s10995-005-0036-0