

Food Insecurity in Children Literature Review

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Abstract

The following literature review will examine evidence on food insecurity in children within the United States. Observation of established food security enables a thorough review of risk factors that increase food insecurity among children. Outlining the outcome of risk factors highlights the effects of which negatively impact children's well-being. Review of interventions holds accountability for the effectiveness and inefficiency in addressing the foundation of food insecurity. The exploration of emerging methods quantifies the challenges in combating food insecurity amongst children. Consequently, making way for practicality in social work approaches to address long-term food security. Mending implications that food security requires stress on federal supplemental programs already in place to address economic aspects of food insecurity. Reviewing the sufficiency of programs like the Supplemental Nutrition Assistance Program (SNAP) and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) as primary interventions and concluding the addition of a secondary intervention like hands-on nutrition education workshops. As a reinforcement to combat food insecurity, providing basic food education on budgeting, choosing, cleaning, cutting, incorporating, and cooking nutritious foods by hands-on collaboration beginning with children in school.

Introduction

Food Security is often used to indicate a nation's marker of social progression and economic security. The United States Department of Agriculture (USDA) defines food security between four levels; high food security, marginal food security, low food security, and very low food security (U.S. Department of Agriculture, 2021). Consideration of minimum requirements for food security lies between the availability of safe and nutritional foods for all household members and the ability to acquire such foods at all

times in socially acceptable ways (U.S. Department of Agriculture, 2021). Understanding these measures enables an informative review on food insecurity for children in the United States. Prior to the COVID-19 pandemic, 11 million children were food insecure across the United States (Parekh et al., 2021). The pre-pandemic level of food insecurity among children was 7.8% then, and food insecurity has now risen to 17.5% among children during the COVID-19 pandemic (Parekh et al., 2021). Food insecurity has long been associated with adverse health outcomes and deterrents

to social well-being (Jun et al., 2021). Food insecurity amongst children causes social problems that threaten national security, social welfare, and the overall decline of health and well-being of the children in the United States.

Food insecurity within children in low-income households is hindered by food cost and economic hardship in conjunction with geographical, political, racial, and employment obstacles. The relevance of food insecurity and social work lies in the challenges faced by the public in both health outcomes and academic outcomes. They require assessment and connection to resources by outside channels as a means of preventative services to counteract the effects of food insecurity in academic performance and behavioral problems in children (Wang & Black, 2019). As defined by the USDA, low food security is determined by reducing the quality, variety, and desirability of a household's diet intake. However, the quantity of food and standard eating patterns were not afterward disrupted (U.S. Department of Agriculture, 2021). The USDA defines very low food security as a disruption of food intake for one or more household members due to a lack of money and resources for food (U.S. Department of Agriculture, 2021). Prevalence within the low food security and very low food security amongst children at a rate of 17.5% (Parekh et al., 2021). Places close to 24.7 million children skipping a few meals or dealing with scarceness of food within the week across the United States.

Evidence-based interventions to reduce food insecurity among children range from individual awareness, community partnerships, county-wide food relief, state screenings, federal welfare programs, and the implementation of national programs (Fram & Frongillo, 2020). Due to the scope of food security on the social outcomes within society, social workers' awareness on

the issue is one in securing a fundamental need to achieve overall well-being for children. Understanding what is needed to combat food insecurity starts with understanding if free food is the solution. Fram and Frongillo (2020) discuss the importance of finding new and innovative interventions in combating food insecurity, moving past the distribution of free food. When implemented universally across low-income schools in Virginia, the distribution of free food subsequently led to higher food insecurity for those within the low food security group (Fram & Frongillo, 2020). For a start, those within controlled conditions identified to be of very low food security found a beneficial improvement after intervention methods due to the provision of additional food outside of their average capacity (Fram & Frongillo, 2020). While Burke and colleagues (2020) sought to promote a send home nutrition program embedded within schools to combat food insecurity, findings further support the importance of finding new innovative ways to combat the public health threat found in food insecurity.

Literature Review: Evidence of Food Insecurity in Children

Food insecurity in children in the United States has been documented and surveyed in great abundance. The evidence reflects the risk factors contributing to food insecurity which share recurring themes of being underserved, marginalized, poverty-stricken, isolated, and systematically disenfranchised (Leitz, 2018). A thorough review of the risk factors and the food insecurity outcomes will detail the importance of further support to form a targeted approach to the subject. Additionally, a subsequent review of the Federal and Child-focused interventions that form supplemental resources to help address food insecurity in the United States.

Risk Factors

The experience of food insecurity in children has characteristics that make some groups more susceptible to experiencing hunger and limited access to food than others. These risk factors contribute to outcomes that make food security one of the most critical health concerns in children due to the relationship between mental, social, emotional, and physical health (Perez-Escamilla & Pinheiro De Toledo Vianna, 2012). Low income has been one of the most significant indicators of food insecurity in households. Yet, households that do not qualify for assistance programs make up one-third of that food insecurity due to being above the federal poverty levels (Schanzenbach et al., 2016). Being a child in itself creates a higher likelihood of being food insecure in the United States (Wehler et al., 2004). Predictability is found in higher rates for children in households with single parents or mothers suffering illness or substance abuse (Gundersen & Ziliak, 2014). Notably, child food insecurity was dependent on summer recess, inconsistency in child support payments, and residential instability (Gundersen & Ziliak, 2014). Demographics on race suggest that black and Latino households are at higher risk of experiencing food insecurity than households with immigrant parents (Children's HealthWatch, 2021; Cook & Jeng, 2009). Considerations for geographical risk factors are rural areas where food deserts] are prevalent and urban areas where access to good supermarkets and grocery stores is outnumbered by fast food and restaurants (Coleman-Jensen et al., 2011; Texas Health and Human Services, 2018).

Outcomes

Food insecurity's risk factors and consequences have been studied in great

abundance due to the adverse health effects of hunger on children (Leitz, 2018). Within academic achievements, children experiencing any level of food deprivation score lower on math and reading scores due to food insecurity (Winicki & Jemison, 2003). Cognitive performance suffers from impairments of development skills, social skills, and self-control in households suffering from food insecurity (Howard, 2011). Hindrance of cognitive performance is significantly substantial. Children who face food insecurities in the first year continue to have impairments, even if they are food secure, until the fifth year (Howard, 2011). Depression and suicide rates are also higher in adolescents who experience food insecurity in the United States; findings detail food deprivation across 15-16-year-olds to positively link to the impact of hunger (Alaimo et al., 2002). Mental health concerns are not isolated to just that age group but all stages of childhood, especially during prenatal and during periods of rapid brain growth (Cook, 2012). Implications of food insecurity amongst children create the outcomes of chronic diseases, adverse physical health, and mental health in children (Weinreb et al., 2002). As a result, the importance of health and the limitation of food insecurity amongst children is abundantly clear for their well-being and success.

Evidence of Interventions

As Katz (1983) best describes comparing the 1870s to the 1980s, "*Then, as now, respectable citizens worried about rising crime and radicalism and complained about high taxes spent on useless public programs...Private philanthropy, they said, would fill any genuine gaps left by the reduction in the public sector.*"

Today interventions range from Federal to State policy into community-based philanthropic efforts. All

targeted to alleviate food insecurity, not eliminate it. As noted previously, risk factors hinder food insecurity relief efforts found within the at-risk populations in the United States. The review of federal and direct child nutrition interventions provides a clear view of the supplemental strives to address food insecurity amongst children in the United States.

Child-Focused Nutrition Interventions

The United States has policies directed to children in school and childcare environments to reduce food insecurity. The Child and Adult Care Food Program (CACFP) focuses on providing meal regulations entwined with reimbursements for the implementation of healthy meals and snacks served to children and adults within an array of care settings (Institute of Medicine (US) Committee to Review Child and Adult Care Food Program Meal Requirements, 2011). The Fresh Fruit and Vegetable Program (FFVP) targets selected low-income elementary schools by providing free fresh fruits and vegetables to prevent childhood obesity (Ohri-Vachaspati et al., 2012). The National School Lunch Program (NSLP) provides school districts, and independent schools that serve lunches in alignment with the federal requirements with cash support in exchange for meals served and free or reduced meals provided (Olin et al., 2017). The School Breakfast Program (SBP) provides breakfast reimbursements for every meal served, along with a higher return for a free or reduced meal served to eligible children (Hermes, 2012). Similarly, the Summer Food Service Program (SFSP) maintains accessibility during the summer recess providing reimbursements for meals served (Miller, 2020). Finally, the Special Milk Program (SMP), which focuses on schools that do not participate in other federal programs along with childcare centers and

summer camps providing fat-free or low-fat milk containing vitamins A and D at a reduced price or free of cost to children (United States Department of Agriculture, 2012).

Federal Intervention

Child-focused interventions accompany the Supplemental Nutrition Assistance Program (SNAP), which provides low-income and no-income households with supplemental assistance towards their food budget to decrease food insecurity (Nestle, 2019). Along with SNAP, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) targets pregnant women, infants, and children under 5 to improve food security (Metallinos-Katsaras et al., 2010).

The emergence of a rights-based approach in food security creates a new lens into the importance of human dignity and the basic right to food (Chilton & Rose, 2009). Considering the importance of federal interventions and child-focused nutrition efforts on alleviating food insecurity in children, these need-based approaches have not eliminated food insecurity in children. Some might consider these policies comprehensive for low-income to no-income households. However, a reminder of those who do not qualify for such a program is urged.

Emerging Interventions

The impact of food security is all-encompassing. Emerging interventions with total health care approaches have shown success in clinical trials toward improved dietary intake and reduction in type 2 diabetes (Ferrer et al., 2019). Primary Care Providers (PCPs) are being equipped to combat food insecurity in collaboration with local food banks ensuring patients obtain nutritious foods, such as produce, via home delivery and consultation with a food bank

dietician (Ferrer et al., 2019). Removing communication barriers and offering new partnerships through direct referral from PCPs have shown positive outcomes thus far.

A pilot program focused on individualized food prescriptions filled by partnering food banks has shown 94.1% effectiveness in reducing food insecurity among participants (Aiyer et al., 2019). Partnering with school-based clinics and a Federally Qualified Health Center (FQHC), the pilot showcased the feasibility of collaborative clinic-based food prescription programs and gave attentiveness to the program cost (Aiyer et al., 2019). Redemption per participant costs \$12.20 biweekly for each of the 12 visits to the food pantry (Aiyer et al., 2019). Families were allowed to collect 30 pounds of fresh fruits and vegetables (Aiyer et al., 2019). The program was well-received by both providers and participants; acknowledgment of the need and efficiency is noted (Aiyer et al., 2019).

Hands-On Nutrition Education (HONE) utilizes cooking skills to promote the intake of fresh fruits and vegetables as an educational foundation method for nutrition. Food preparation continues to be a barrier to food security. Holtermann (2019) noted that promoting food preparation in primary and secondary schools leads to bridging a gap for children between their perspectives on vegetables, such as mushrooms and beans, with nutritious and delicious outcomes. Furthermore, the Dietary Guidelines Advisory Committee (2015) has urged the mandatory implementation of HONE as studies support the positive effects of home cooking on the health and well-being of children.

Implications for Social Work Research

Moving forward research literature has emphasized multiple points for further

exploration. Significantly, the suggestion to review policy measures against inflation and basic benefit budgeting used by SNAP since 1977 (Schanzenbach et al., 2016). To measure the accuracy held to meet the needs faced by households today, it is imperative that further research must focus on rights-based approaches. It highlights the need for automated enrollment for those who qualify for SNAP based on health insurance qualification and income tax filings (Chilton & Rose, 2009). Exploration into better protecting the lower-middle-class, which accounts for the 41% percent of food-insecure households who do not participate in a federal program, is also of great importance in alleviation efforts towards food insecurity (Coleman-Jensen et al., 2011). Observation in theory that policy regarding food insecurity is driven by perceptions of the poor and not necessarily a need-based approach in which resources are available for those facing food insecurity (Nestle, 2019).

Moving forward within the social work research, focusing on essential suggestions from Gundersen and Ziliak (2014) indicates that food insecurity is different for children. With this, the prescription within the causes of food insecurity is also different in comparison to their parent's perspective (Gundersen & Ziliak, 2014). This questions which perspective is more important to capture in the policy response to address food insecurity amongst children in the United States. The difference in the causes of food insecurity can bring about new light within ways to target and support efforts towards food security. A review of the literature supports more to do within relief efforts for food insecurity amongst children in the United States. Considering a child's approach to food insecurity could provide the measurements needed to create a

child-based approach to meet the needs to combat food insecurity in children in the United States.

Conclusion

This literature review has reviewed the risk factors that make certain children in the United States prone to food insecurity. Exemplifying research and observations made towards food insecurity outcomes in the United States contribute to the urgency within the topic. The review of federal interventions gives a glimpse into the relief efforts in place to combat food insecurity in children. At the same time, focus towards child-focused nutrition efforts highlights interventions providing relief through institutional and childcare environments enabled by reimbursements in exchange for meals provided.

Following up on the topic of food insecurity in children in the United States should consider a child's perspective and

approach to solving food insecurity to aid relief efforts. Consideration on the evaluation of the importance of basic kitchen knowledge in combating food insecurity in children and families, following up with the introduction of hands-on nutrition education for qualifying families. Seeking the answers to two crucial questions; What is a child's perspective in solving food insecurity? Does hands-on nutrition education improve food security outcomes for low-income children?

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