



Food insecurity among parents of young children in the United States and Australia: focusing on etiology and outcomes

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Abstract

The purpose of this commentary is to highlight the established etiology and outcomes related to food insecurity for families with young children (ages 0–5 and pregnant women) living in the U.S. and Australia. We initiated a cross-country research collaboration between the United States (U.S.) and Australia in order to gain an understanding of food security across two high-income countries in terms of definitions and measurement, causes and consequences, welfare provisions, and food systems. Throughout this work, key factors that drive similarities and differences related to food insecurity were identified to include: economic, social, geographical, and political influences. Despite many similarities between the U.S. and Australia, several differences noted included: a broader definition of food security in Australia (yet limited surveillance/measurement in both countries), differing policies and government support for low-income populations, varying structures and reach of emergency food systems, and divergent food access challenges. In order to foster shared learning and dissemination of “what works” to address food security across the globe, it is essential to widen our view and collaborate across borders and sectors.

Keywords Food insecurity · Cross-country research · Young children · Pregnancy

1 Background

Lack of food security is a global concern, and despite having access to greater resources including wealth, international data demonstrates that high-income countries report population prevalence of food insecure households ranging from 8 to 20% (Pollard & Booth, 2019). Historically, food security has been addressed by countries individually, with limited cross-country collaboration and, consequently, limited shared understanding and scholarship. A cross-country collaboration between research groups in the United States (U.S.) and Australia was initiated in order to gain an understanding of food security across two high-income countries in terms of definitions, measurement, potential causes, welfare provisions, and food systems. The purpose of this commentary is to highlight the established etiology and

outcomes related to food insecurity for families living in the U.S. and Australia.

2 Defining and measurement of food security

Conceptualizing food security is important in developing a common understanding of a complex and multifaceted phenomena. In the U.S., the widely held definition of food security for a household means access by all members at all times to enough food for an active, healthy life. The definition of food security in Australia is based on the United Nations' Food and Agriculture Organization (FAO) definition which contains four pillars, extending beyond *food access* to also include *food availability* (location of food outlets; price, quality); *food utilization* (knowledge, skills, cooking facilities); and *food stability* (consistent supply of food, stable food prices; Food and Agriculture Organization, 2012). Another key difference in conceptualizing food security is within the concept of the ‘right to food’. While Australia has ratified the International Covenant on Economic Social and Cultural Rights (ICESCR), which includes a ‘right to food’, this concept is absent from Australian domestic law.

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Conversely, the U.S. has not ratified the ICESCR, yet there is federal funding for food banks, which indicates there is coordinated support for food security.

Stemming from definitions of food security, operationalization leads to identification of variables, and informs measurement. The U.S. relies heavily on the U.S. Department of Agriculture (USDA) Household Food Security Survey Module (HFSSM), which emphasizes the economic dimension of food security but does not detect fluctuations over time. The HFSSM offers a standardized approach to assessing food security, with 6-item and 18-item versions, depending on the needs of the study. A recent review in Australia found that 22 studies used a single-item measure, 11 used the HFSSM; 2 used the Radimer/Cornell instrument; 1 used the Household Food and Nutrition Security Survey; and the remainder used a less rigorous method (McKay et al., 2019).

Beyond measurement in individual studies, ongoing surveillance systems also influence our understanding of food security across populations. In the U.S., the HFSSM is applied annually to several large surveillance surveys (e.g., ~40,000 households in the Current Population Survey). In Australia, food security is measured less systematically with variations of a single item ‘in the last 12 months have you run out of food and couldn’t afford to buy more’ (Australian Bureau of Statistics, 2013). The use of 1–2 items and the infrequency of assessment leaves uncertainty around rates of food insecurity in Australia. These contrasting approaches to monitoring food security highlight gaps. Despite a more robust definition of food security in Australia, measurement and surveillance is limited. One could surmise that limited surveillance of food security in any nation may be due to budget constraints, competing priorities, or capacity issues. However, in order to ascertain the true burden of food insecurity and to be able to make meaningful comparisons between countries, it is imperative to employ accurate and robust measures.

3 Causes and consequences of food insecurity

Despite differences in the definition and measurement of food security, there are common factors among those at higher risk for food insecurity in the U.S. and Australia. Unsurprisingly, income is a key indicator and experiencing material hardship is inextricably linked to unemployment/underemployment in both countries (Gundersen et al., 2011). Other common factors that may be intertwined with poverty include: single-parent households, living in rental/government housing, low education, physical disability, and living in rural areas (Gundersen et al., 2011; Rosier, 2012). One foundational difference between the U.S. and Australia, is how race/ethnicity are conceptualized. In the U.S., specific racial/ethnic minority groups (e.g., African American)

are cited as experiencing higher than average rates of food insecurity (Myers & Painter, 2017). Furthermore, acculturation and its relationships to food security among recent immigrants to the U.S. have been examined. Conversely, in Australia, monitoring race is less granular, and racial minority populations are combined into a “Culturally and Linguistically Diverse” (CALD) group, which includes those with diverse backgrounds, potentially newly arrived, and/or refugee populations. Those with CALD backgrounds experience food insecurity at higher rates than the general population (Lindberg et al., 2015; Rosier, 2012). In addition, Aboriginal or Torres Strait Islander people in Australia have not achieved food security for a range of reasons, including a history of colonization, systemic racism, and lack of healthy food access (Davy, 2016).

4 Government assistance

Most high-income countries have some form of government assistance, but the programs can vary widely depending on political ideology, history, and needs. In the U.S., there are fifteen federal programs that are specific to food aid (i.e., food commodities and/or food assistance), the largest of which is the Supplemental Nutrition Assistance Program (SNAP). Australia has a range of welfare programs that provide government-funded income support for aged, disabled, parents of young children, and employment seeking persons and family tax benefit payments that help low-income families, but unlike the U.S., there are no large governmental food-specific assistance programs. A national survey in Australia found that 83% of households lacking food security received some form of welfare income in 2015–2016, with 75% listing this as the main source of income (Temple et al., 2019). For comparison, one in seven Americans participates in SNAP, which represents 85% of those eligible (Cunningham, 2018). Despite variances between countries, an unfortunate commonality is that government support allotments do not keep up with cost of living, and many families “fall through the cracks” and live below the poverty line.

5 Emergency food systems

Across high-income countries, charitable or emergency food sectors help fill gaps that formal assistance programs leave. There are more commonalities than differences between the U.S. and Australia, however, the U.S. emergency food system appears to be more coordinated. Feeding America is a domestic hunger-relief organization that serves as an overarching umbrella organization for over 200 food banks and 60,000 food pantries. In Australia, most food rescue and redistribution occur through four main providers: Foodbank Australia, SecondBite, OzHarvest, and FareShare. Across emergency food systems in both countries, the healthfulness

of foods has become a consideration as evidence suggests the food provided to vulnerable populations is often of poor nutritional quality. Providers of emergency food assistance in both countries are working to provide more fresh produce utilizing strategies such as nutrition-profiling systems. However, these efforts are often limited in scope, and implementation of more formalized nutrition policies is controversial and challenging (Handforth et al., 2013).

6 Food availability

Most of this commentary has focused on the food access pillar of food security, as is the case in most scholarship in this area. Food availability includes the location of food outlets, types of foods available, and the price, quality, and variety of foods, thus impacting consumption and health-related outcomes. Some communities in both countries have a geographical layout that fosters healthy food access with increased walkability, while others have limited healthy food access. These less resourced areas are commonly referred to as “food deserts” (i.e., low-income neighborhoods with inadequate access to healthy foods) and “food swamps” (i.e., areas with a high-density of high-calorie junk food; Cooksey-Stowers et al., 2017). The places where people live, work, and play have an impact on the ability to access healthful foods, and consideration of the nuanced differences between countries when collaborating on food security may elucidate potential contextual factors.

7 Conclusions

The emergence of the COVID-19 pandemic has resulted in economic fallout and social disruption spreading across the world, and consequently many more people are at risk of losing food security. When collaborating to address food security across borders and nations, it is important to consider the economic, social, geographical, and political differences and similarities. There are many similarities in conceptualization, measurement, and programs to address food security between high-income countries. Key differences that arose in this partnership included: a broader definition of food security in Australia (yet limited surveillance in both countries), differing policies for low-income populations, and varying structures and reach of emergency food systems. Furthermore, we discussed different forms of government assistance and the charitable food sector, and although aiding those who lack food security is important and necessary, these temporary solutions (i.e., “band aid” approaches) distract from the ineffectiveness of government policies and local solutions in addressing upstream social determinants (e.g., poverty, employment, housing). In the spirit of shared learning and disseminating “what works” to address food

security across the globe, it is important for researchers and practitioners alike to widen their view and collaborate across borders and sectors.

Declarations

Competing interests None.

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