U.S. Commentary: The Family Options Study and Food Insecurity

Elaine Waxman Urban Institute

Introduction

Housing and food insecurity often coexist in the same household and reflect tradeoffs between basic needs that families grapple with when facing limited and often unstable income (Cutts et al., 2011; Heflin, 2006; Joyce et al., 2012). Unfortunately, research often fails to examine the intersection of material hardships (Ziliak, 2015) or fully explore how strategies intended to address one domain may influence outcomes in another. The Family Options Study breaks new ground, not only because of the insights it provides into strategies for improving family housing outcomes, but also because it illuminates the role of housing subsidies in reducing other material hardships like food insecurity (Gubits et al., 2016). For policymakers, practitioners, and researchers interested in strengthening low-income communities, the Family Options Study is a powerful reminder of the importance of rigorously evaluating interventions with an eye firmly focused on how they contribute to overall family well-being.

The Intersecting Nature of Housing and Food Insecurity

Prior research has shown that low-income households often struggle with multiple kinds of material hardship, including both housing and food insecurity (Heflin, 2006; Joyce et al., 2012; Sandel et al., 2014). When families experience housing cost burden, food budgets are often among the first expenses to be cut. An analysis of 2012 consumer expenditure data among renters within the lowest quartile of incomes (about \$15,000 annually) shows that food expenditures were reduced by more than one-third among households facing severe rent burden (spending more than 50 percent of their income on shelter) when compared with renters with more affordable housing costs (JCHS, 2013). Tradeoffs between housing and food costs are frequently reported among households visiting food pantries and other charitable feeding programs. A 2014 Feeding America study of more than 60,000 charitable feeding clients revealed that more than one-half of client households (57.1 percent) reported trading off between housing costs and food budgets at least once in the prior 12 months; 27.2 percent reported doing so every month (Weinfield et al., 2014).

The consequences of both housing insecurity and food insecurity for overall family well-being are concerning. Food insecurity is associated with a variety of poor health outcomes in individuals of all ages. Children living in food-insecure households are more likely to be in fair or poor health, to

be hospitalized, to suffer from asthma, and to experience cognitive challenges, anxiety, depression, and aggression (Gundersen and Ziliak, 2015). Among adults, food insecurity is associated with increased risk of maternal depression (Casey et al., 2004); higher rates of chronic diseases, such as hypertension and diabetes among adults (Seligman et al., 2007; Seligman, Laraia, and Kushel, 2010); and higher annual healthcare expenditures (Tarasuk et al., 2015). Similarly, housing insecurity has also been associated with negative health outcomes among children and adults (Burgard, Seefeldt, and Zelner, 2012; Cutts et al., 2011). Taken together, housing and food insecurity have been associated with delaying needed medical care and medications and with increased emergency department visits and inpatient hospitalizations (Kushel et al., 2006). As a result of poorer health and greater utilization of more expensive healthcare settings, individuals struggling with material hardship may face an escalating series of financial pressures (Seligman and Schillinger, 2010). Therefore, identifying effective strategies that can reduce material hardship and disrupt cycles of economic instability is a high priority for improving the health and well-being of vulnerable families.

Assessing the Impact of Family Options Study Housing Interventions on Food Insecurity

As reported elsewhere, the Family Options Study has provided a unique opportunity to examine the relative effectiveness of multiple strategies for improving housing outcomes for families who spent at least 7 days in emergency shelter before enrolling in the study. A large sample of families across 12 communities were randomly assigned to priority access to one of four interventions: long-term housing subsidies (the SUB group), project-based transitional housing (the PBTH group), temporary community-based rapid re-housing (the CBRR group), and usual care (the UC group; that is, families left to navigate various options available in their communities). The results at the two primary points of observation—20 and 37 months—showed significant improvements in housing outcomes for those families who were given priority access to long-term housing subsidies when compared with usual care. Reported use of shelters or doubling up declined by more than one-half, and families were more likely to be residing in their own place and to have experienced fewer moves in the prior 6 months.

The Family Options Study researchers were intentional in their inclusion of multiple measures of family well-being and what the researchers defined as indicators of self-sufficiency; both types of indicators were assessed at baseline, 20 months (the point at which temporary housing support typically ended), and 37 months. Measures of food security were grouped under the indicators of self-sufficiency, along with indicators of work activity, education/training receipt, income, and economic hardship. The researchers employed the validated short form of the U.S. Department of Agriculture's Core Food Security Module (CFSM), which consists of six items (Blumberg et al., 1999). The short-form survey offers an alternative to the standard 18-item survey module for households with children to reduce respondent burden in survey research. Scoring of the short-form survey is typically used to designate a binary status for households—households with zero or one affirmative responses to the questions are designated as food secure; households with affirmative responses to two or more questions results in the household being characterized as food insecure. Although the published results also report an average cumulative item score for households in each intervention

group, the inclusion of both food-secure and food-insecure households in the average scores makes it difficult to interpret if interventions were more effective in helping families become food secure or reducing the severity of their food insecurity. Additional future analyses can more fully exploit the available data for insights into depth and severity of food insecurity (see Gundersen [2008] for more on this approach). This commentary focuses on the prevalence results.

The CFSM assesses a condition that is economic in nature—meaning a food-insecure household's access to adequate food is limited by a lack of money and other resources (Coleman-Jensen et al., 2016). However, as discussed previously, the association between food insecurity and compromised health and well-being is well documented and, thus, food insecurity can also be thought of as important indicator of adult and child well-being.

In reviewing the results of the Family Options Study with respect to food security measures, it is helpful to remember that food security tends to be a recurrent, albeit episodic, condition. Prior research has indicated that, on average, a food-insecure household experiences food-related hardship about 7 months in a year (Coleman-Jensen et al., 2016). Families likely vary somewhat in their individual household experiences; for example, some may be food insecure for a few days each month when resources run low after covering basic needs, whereas others may have persistent periods of food insecurity, especially when unemployed or unable to work and without access to food assistance programs.

It is also important to note that, across all intervention groups, uptake of the Supplemental Nutrition Assistance Program (SNAP), the primary federal nutrition safety net program, was already quite high (more than 80 percent), as might be expected for very vulnerable families. As discussed in the following sections, research has previously documented the positive impact of SNAP on reducing food insecurity; thus, the rates of food insecurity reported throughout the study would have been expected to be much higher in the absence of that program.

The researchers have reported pairwise results, providing the opportunity to examine each intervention against usual care and to compare options against each other. Results are reported as intention-to-treat (ITT) effects (the outcomes for all individuals originally randomized to a given intervention, regardless of subsequent engagement).

Food Insecurity Prevalence and Usual Care

Given the Family Options Study participation criterion that families must have spent at least 7 days in emergency shelter prior to enrollment, it is not surprising that the prevalence of household food insecurity among participating households was very high. Families in the UC arm—meaning that they were not given priority access to any intervention and were left to navigate any available options on their own—had a household food security rate of 46.8 percent at 37 months. During the period of 2012 to 2015, when most participating families would have completed their time in the study, the average household food security rate in the United States ranged from 14.5 percent in 2012 (Coleman-Jensen, Nord, and Singh, 2013) to 12.7 percent in 2015 (Coleman-Jensen et al., 2016). Nationally, families with incomes below the federal poverty level are those most comparable to Family Options Study families—the rates among these families ranged from 40.9 percent in 2012 to 38.3 percent in 2015 (with a high of 42.1 percent in 2013).

Food Insecurity Prevalence and Community-Based Rapid Re-housing

In the Family Options Study, the CBRR intervention offered participants priority access to temporary rental assistance (usually for 7 to 8 months) and limited services focused on housing search assistance, self-sufficiency, and basic services coordination (Gubits et al., 2016). In the case of the CBRR group, when compared with the UC group, the short-term ITT effects at 20 months showed some statistically significant improvement in household food insecurity rates at the 0.10 level—6 percent fewer families were food insecure. However, the improvements were no longer apparent at the 37-month mark, suggesting that, although temporary household assistance that in effect boosted household income for a limited period might have provided some respite to economic pressures, it was not sufficient to position families on a more economically stable path for the longer term. Interestingly, housing outcomes were also largely insignificant at 20 and 37 months.

Food Insecurity Prevalence and Project-Based Transitional Housing

The PBTH intervention in the Family Options Study offered priority access to a place for families to stay for a finite period of time and paired that placement with a wide array of supportive services, including case management and either direct provision of or referral to services based on a family needs assessment (Gubits et al., 2015). The level of service support is designed to be far more extensive than what may be provided through CBRR. The theory behind PBTH models is that combining short-term housing placement with significant social service support can help families stabilize and assist them in overcoming barriers that would prevent them from moving to a permanent housing solution. PBTH interventions may be of particular interest to those concerned with improving food insecurity, because referrals to community-based services (for example, charitable feeding programs) and assistance with benefit applications for federal nutrition programs are typically components of the package of services offered to clients, alongside intensive case management. However, results at both 20 and 37 months showed no impact on rates of food insecurity, rates of uptake of SNAP benefits, or any of the other self-sufficiency measures included in the study. The finding that temporary housing support with an intensive service component did not appear to have an impact (in contrast to the short-term improvement in food insecurity and some other measures in the CBRR group, which had access to more limited support services) is somewhat puzzling. The lack of impact might be partly explained if screening for these services tended to engage highly vulnerable families who were already connected to other services that might ameliorate food insecurity (for example, the uptake rates for SNAP were already quite high, and they may already have been familiar with charitable feeding programs, having spent time in emergency shelter). It is also possible that the quality of case management supports and other services in these programs was variable, making it difficult to detect any impact. However, given the striking findings on the impact of a permanent housing subsidy on food insecurity and many other outcomes, as discussed in the following subsection, it is also likely that the length of assistance was simply insufficient to help these families overcome the multiple material hardships they faced and that the associated services were not able to compensate for the resource constraints these families faced.

Food Insecurity and Permanent Housing Subsidies

The findings of the Family Options Study with respect to the impact of the SUB initiative, in contrast to the other interventions, on household food insecurity are striking. Priority access to a permanent housing subsidy significantly reduced the rates of household food insecurity among families when compared with usual care. Food insecurity rates were nearly 10 points lower than those in the UC group, a large effect that was statistically significant at the 0.01 level, a very strong finding. This impact was achieved despite the fact that vouchers were not accompanied by any supportive services.

Comparing the SUB Effect Size With Targeted Strategies To Reduce Food Insecurity

Ascertaining the effects of interventions targeted directly at food insecurity are challenging for a number of reasons. The choice to participate in food assistance programs such as SNAP often reflects a greater level of need on the part of those who seek out benefits than others who might also meet program eligibility criteria (referred to in econometrics as a problem of endogeneity). As a result, without further scrutiny, program participation can often have the perverse appearance of exacerbating food insecurity. In addition, underreporting of program participation in surveys may also create a problem of measurement that is not random. In recent years, rigorous scholarship has sought to correct for these challenges, allowing for greater confidence in the assessment of the positive benefits of nutrition program participation for reducing food insecurity. Kreider et al. (2012) developed one of the strongest of these analyses. Using plausible assumption, they estimate that SNAP participation may reduce child food insecurity prevalence by as much as 12.8 percentage points (28 percent); under other models allowing for misclassified program participation status, the average treatment effect is a reduction of approximately 2.7 points (6 percent). By comparison, the estimated effect size (standardized) for the reduction in household food security rates in the Family Options Study SUB intervention is 17 percent. Although more exploration of the data is warranted, the published Family Options Study results indicate that the effect of permanent housing subsidies may compare favorably with other research on the impact of SNAP in the potential reduction of household food security.1

Both SNAP and permanent housing subsidies operate to expand the family's economic resources, enabling for more food purchases (and potentially food of higher quality). Although SNAP augments food purchasing power directly, permanent housing subsidies reduce the need to trade off among basic needs by freeing resources that can be used for food and other household purchases. With more resources, families may be better positioned to invest in their children, their family's health, and in attaining new skills that may lead to better employment prospects.

¹ Note that uptake of SNAP among families in all arms of the study was quite high, typically exceeding 80 percent. Based on other research, we would expect that, in the absence of SNAP, these families would have had even higher rates of food insecurity.

Implications

Although national food insecurity trends have improved since the record levels recorded during and shortly after the Great Recession, in 2016, 15.6 million U.S. households were still struggling with food insecurity at least some portion of the year (Coleman-Jensen et al., 2017). At least part of the explanation for the insufficient progress in boosting food security lies within the findings of the Family Options Study. This landmark research shows that, when financial pressures created by housing costs are alleviated, the cycle of tradeoffs between paying for basic needs like housing and food can be disrupted, resulting in multiple improvements in individual and communal wellbeing. Unfortunately, without adequate policy investment in affordable housing, the prospects for reducing material hardship are not good. Among U.S. renters in 2014, 21.3 million households were cost burdened, with a record 11.4 million households facing severe burdens (paying more than 50 percent of income for housing; JCHS, 2016). Among the nation's 9.6 million lowestincome renters (earning less than \$15,000), on average, housing costs absorb nearly three-fourths of income (72 percent) (JCHS, 2016). Moreover, housing affordability issues have begun to affect those with moderate incomes as well, increasing the potential pool of those renters who may face insufficient resources to meet basic needs, especially during economic downturns. Those interested in improving the ability of families to afford an adequate healthy diet must consider how the lack of affordable housing options is undermining their existing efforts to reduce hardship and improve outcomes for vulnerable families.

The insights provided by the Family Options Study are particularly critical for the current policy and practice environment for a number of reasons. First, at a time when various safety net programs may be at risk of significant cuts, it is necessary to elevate evidence that suggests how underinvesting in rigorously evaluated policies in one domain—for example, housing subsidies—can contribute to negative consequences for other essential areas of family well-being, like food security. These potential consequences are easily lost when federal agencies or congressional committees construct budgets focused on reducing expenditures within a single department or set of programs, without consideration of how budgetary choices may undermine the efforts of other federal programs (for example, SNAP) and the communities those programs are designed to serve. Second, the attention of service providers can be equally siloed (Allard, 2009). Although providers on the ground are often aware of the multifaceted challenges their clients face, they are also often struggling with their own resource constraints and typically focused on maximizing the set of tools in their specific domain. Although they may sometimes seek partnerships that connect clients with services provided by other programs (for example, low-income housing developments may invite food banks to distribute food to residents on site, or food pantries may make referrals to housing services coordinators), they rarely operate with a clear understanding of how policy and program investments in one domain can create significant improvements in their own. Finally, although the results of the Family Options Study in improving both housing and food security outcomes are impressive, it is instructive to remember that many of these families remain quite vulnerable. Even when evidencebased programs, such as permanent housing subsidies and federal nutrition programs like SNAP, are available and taken up, many households and communities continue to struggle, which makes it all the more imperative that alternative policy proposals be closely scrutinized to determine whether they can do at least as well, if not better, for low-income families and communities.

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Author

Elaine Waxman is a senior fellow in the Income and Benefits Policy Center at the Urban Institute.

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