Beyond Housing for Homeless People, It Is Crucial to Remediate Food Insecurity

See also Bowen et al., p. 614.

Food insecurity affects nearly 50 million Americans and has been consistently linked with poor health outcomes.[1] Permanent supportive housing provides opportunities to integrate shelter and nutrition for people in need, setting the stage for overall improvements in health. In this issue of *AJPH,* Bowen et al. (p. 614) present intriguing new results of their recent exploratory study, and they highlight the scant attention paid by researchers to food insecurity as an outcome of programs combining housing and support. To our knowledge, Bowen et al. report the first quantitative analysis of food insecurity among residents of housing and support programs in the United States. Although outcomes such as housing stability have been investigated in several trials,[(e.g., 2)] food insecurity has been relatively neglected.

The findings of Bowen et al.'s study strongly suggest that this neglect demands correction. They report that two thirds of residents were food insecure—approximately three times the level expected—despite having lived in permanent supportive housing for an average of nearly five years. They also report that social disparities affecting food insecurity may follow people into permanent supportive housing. Within their sample, the odds of food insecurity were reduced by 8% for each $100 increase in monthly income. The authors discuss several important implications from their research, including a multifaceted approach to increase earned income and greater inclusion of meal delivery. We applaud these recommendations and offer additional practical and conceptual considerations based on the few additional studies examining food insecurity in the context of supported housing.

STATE OF THE EVIDENCE

Before Bowen et al.'s investigation, only two quantitative studies had investigated the effect of housing and support on food security among homeless individuals.[3,4] Canada's At Home/Chez Soi project involved randomized controlled trials in five cities investigating Housing First with people who met criteria for homelessness and serious mental illness. Results concerning food security were mixed, showing that scattered-site Housing First provided significantly superior food security compared with usual care in two of the five collaborating centers and only among participants who met criteria for "high" needs (e.g., recent psychiatric hospitalization, required assistance with daily living).[3] Like Bowen et al., our Canadian colleagues suggested that food insecurity may have been attributable to poverty and low access to nutritious food, adding that the mixed results might reflect local differences in service delivery or study samples.[3] Another Canadian study[4] used a quasi-experimental design to examine the effect of supported housing involving intensive case management and rent assistance compared with intensive case management only among a small sample (n = 60) of people experiencing chronic homelessness. Over a six-month follow-up period, treating time as a within-group factor, supported housing with intensive case management was associated with significantly increased food security, but the group-by-time interaction was not significant.[4]

These studies reinforce a key finding identified by Bowen et al.—namely, that it may be common, and even the norm, for people in supported housing to live with food insecurity. Although this literature is in some respects very preliminary, it has the advantage of including results from several cities and diverse settings. The similarities found across Canadian cities and Bowen et al.'s results in Los Angeles, California, suggest that local differences in social services do not trickle down to produce substantial differences in food insecurity among people who need housing and support.

METHODOLOGICAL AND PRACTICAL CONSIDERATIONS

The next steps suggested by Bowen et al. can benefit from a critical review of the methods and approaches used to date by investigators, beginning with the selection of research instruments. A modified version of the US Department of Agriculture's Adult Food Security Survey Module has been reported as preferable to the original by homeless participants and also classified a greater proportion of participants as being less food secure.[5] Bowen et al.'s use of the original questionnaire therefore may have underestimated food insecurity in their sample.

A second critical point raised by Bowen et al. concerns the selection of strategies to improve food security and the development of evidence that can be used to inform policies and service design. One of our own efforts in that direction is offered as cautionary. In our three-arm study with participants who were homeless and mentally ill, we hypothesized that food insecurity would be higher among people randomly

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assigned to usual care (e.g., absence of appliances and storage space; minimal income) compared with those randomly assigned to both scattered-site and project-based housing. Both active interventions included Assertive Community Treatment. Those in scattered sites had private apartments with kitchens, whereas the project-based site included a commercial kitchen and large dining area, enabling storage, preparation, and serving of meals to residents. After 24 months, we observed no differences between groups in food security. Even more surprising was that our usual-care condition (in which few people received housing) approached statistical significance for superior food security over scattered-site Housing First.[6] Our best explanation for this difference was the high density of convenient and nutritious sources of food in the Vancouver, British Columbia, neighborhood where homelessness is most highly concentrated. Relocation to a secure home with support services emphasizing client choice and autonomy was not sufficient to outperform the level of food security provided to many of Vancouver's long-term homeless citizens.

Bowen et al. wisely orient us to research questions concerning plausible means of improving food security, ranging from promoting the development of clients' interests and abilities to the delivery of meals. We emphasize the need to consider the combined public health effect of food and housing policies and services. The provision of food resources where people are homeless is essential. However, planners must ensure that practices that achieve food security follow people as they exit homelessness. Policies that vary from place to place, such as income assistance levels, publicly funded medical and other benefits, food stamps, and meal programs, warrant careful consideration when planners contemplate the local applicability of research findings. This places a responsibility on researchers to provide adequate details of local contextual factors that might influence food security in their samples.

CONCLUSIONS

Bowen et al. point to the established evidence of premature aging and mortality among residents in permanent supportive housing and suggest that food insecurity may be an unrecognized contributor. This hypothesis requires urgent empirical investigation and has promise to stimulate improvement in a wide array of health indicators. Therapeutically, practices related to food security fit comfortably in the psychosocial rehabilitation model, which emphasizes the promotion of clients' abilities and is a conceptual forerunner to contemporary Housing First.

Long-term research is needed to investigate the clinical and social practices that best achieve food security among the increasing numbers of people living in housing with support and the effects of those practices on health, social functioning, and associated consequences for public costs. Bowen et al. remind us that although housing is a determinant of health, it is not sufficient to improve all other determinants of health. Recent research has highlighted several domains in which existing models of housing and support appear to need reinforcement, including overcoming addictions, reducing sexual risks, and promoting community integration. Research must go beyond housing retention to focus on the qualities of housing and support that deliver the best long-term outcomes for residents and for society. Food, that most essential of medicines, should play a central role in this research. AJPH

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CONFLICTS OF INTEREST

The authors have no conflicts of interest to disclose.

REFERENCES

1. Gundersen C, Ziliak JP. Food insecurity and health outcomes. *Health Aff (Millwood)*. 2015;34(11):1830–1839.

2. Tsemberis S, Gulcur L, Nakae M. Housing First, consumer choice, and harm reduction for homeless individuals with a dual diagnosis. *Am J Public Health*. 2004; 94(4):651–656.

3. O'Campo P, Hwang SW, Gozdzik A, et al. Food security among individuals experiencing homelessness and mental illness in the At Home/Chez Soi Trial. *Public Health Nutr*. 2017;20(11): 2023–2033.

4. Pankratz C, Nelson G, Morrison M. A quasi-experimental evaluation of rent assistance for individuals experiencing chronic homelessness. *J Community Psychol*. 2017;45(8):1065–1079.

5. Holland AC, Kennedy MC, Hwang SW. The assessment of food security in homeless individuals: a comparison of the Food Security Survey Module and the Household Food Insecurity Access Scale. *Public Health Nutr*. 2011;14(12): 2254–2259.

6. Somers JM, Moniruzzaman A, Patterson M, et al. A randomized trial examining Housing First in congregate and scattered site formats. *PLoS One*. 2017; 12(1):e0168745.