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Community Health Advisory & Information Network

Fact Sheet

HIV/AIDS, Food & Nutrition Service Needs

While adequate food and nutrition are basic to maintaining health for all persons, good nutrition is crucial for the management of HIV infection. Proper nutrition is needed to increase absorption of medication, reduce side effects, and maintain healthy body weight. Several conditions associated with HIV/AIDS can be managed with proper nutrition. Good nutrition reduces the risk for or helps manage other chronic diseases such as heart disease, diabetes, and cancer. Food security and good nutrition are linked to improved health outcomes for PLWHA both directly and indirectly. Food insecurity is a source of chronic stress that has consequences for immunological functioning, as well as for mental health and for adherence to medical treatments. In addition, providing food and nutrition services can serve to facilitate access and engagement with medical care, especially among vulnerable populations.

This Fact Sheet summarizes food and nutrition service needs, use of food and nutrition services, and medical care and health care outcomes associated with food insecurity among representative samples of adults living with HIV in New York City and the northern suburban region of Westchester, Putnam, and Rockland counties.

Need for food and nutrition services is almost universal

Based on rates seen in the study population, the great majority of persons living with HIV/AIDS (PLWHA) in New York City (89%) and in the Tri-County region (85%) are experiencing food insecurity or rely upon food and nutrition programs to address their most basic needs (Figure 1).

Many PLWHA rely upon food programs

Eighty percent (80%) of cohort members in NYC and 62% in Tri-County participate in SNAP, the Supplemental Nutrition Assistance Program commonly known as the food stamp program.

Over half of PLWHA interviewed in NYC (55%) and in the Tri-County region (58%) receive services from a food/ nutrition program in the form of (1) meals provided in a group setting, (2) prepared meals delivered to the home, (3) receipt of a food voucher or a grocery bag from a food pantry, or (4) some other help with food or meals. Tri-County residents are more likely to receive food pantry bags than participate in a meal program; the reverse is true for NYC study participants who are more likely to use meal programs (Table 1).

Food insecurity remains widespread

Using standard measures of food insecurity, more than two of every five (42%) study participants in both NYC and Tri-County currently experience food insecurity. Regardless of receipt of food stamps or participation in a food or meal program, they report not having enough money for food that they or their family need, describe their food situation as sometimes or more often not enough to eat, have gone a whole day without anything at all to eat in the past 30 days, or report a continuing need for assistance regarding food, groceries or meals (Figure 1).

METHODOLOGY

- Data for analysis were provided by an ongoing study of persons living with HIV/AIDS in the NYC area: the CHAIN Project.
- The sample was designed to be representative of the HIV-infected population receiving medical and/or social services in either New York City or the Tri-County suburban area.
- Over 1000 individuals were interviewed in 2008-2010.
- Study participants answered questions about food and nutrition experiences, need for services and use of services
- Need for food and nutrition services was determined using a composite measure that took into account both "objective" criteria based upon reports of behaviors and experiences (e.g. not having enough money for food, going an entire day without eating anything at all, etc.) as well as self-reported need for services. The use of any food or meal services was also taken as evidence of need for these services.

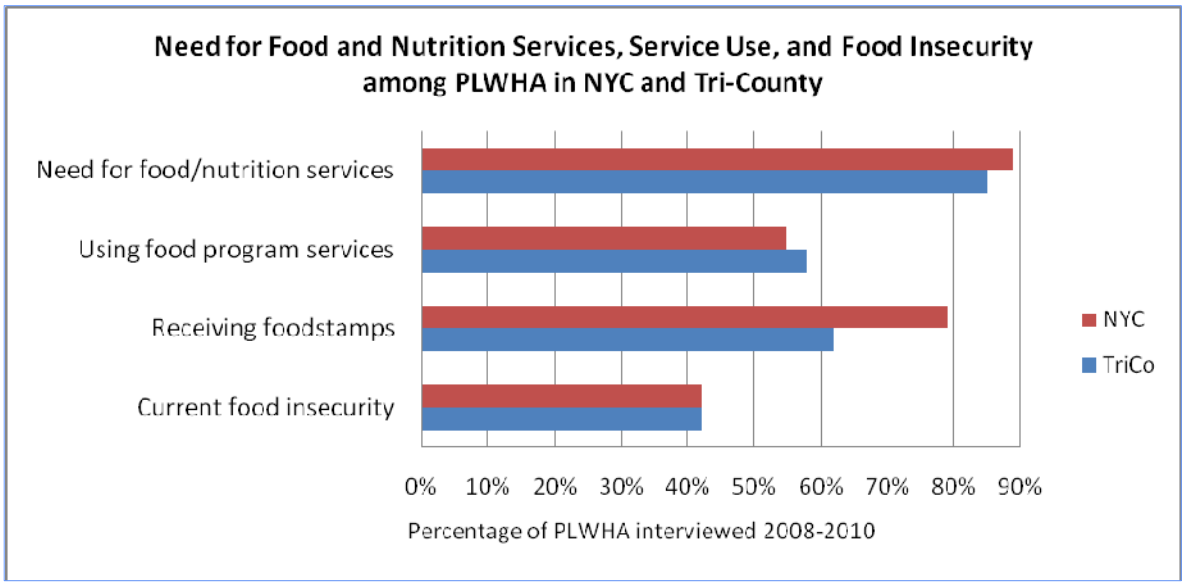

Figure 1. Indicators of Need for Food and Nutrition Services among Study Participants

Nutritional counselling is needed

Fewer than one-third of the study sample in either NYC or Tri-County report receiving nutritional counselling in the six to 12 months prior to interview – most often in the form of group presentations.

Approximately half of cohort members in NYC never reported receiving nutritional counselling during the past 5 years or longer, despite an increase in rates of nutrition-sensitive chronic conditions during this time period, and 60% of study participants were either under or overweight according to BMI at most recent interview. (Over time information on nutritional counselling is not available for the Tri-County sample).

Food insecurity is associated with poor medical care outcomes

Analyses of the CHAIN data show that PLWHA who are food-insecure report more missed appointments for HIV primary care and more emergency room visits compared to those who do not report difficulties obtaining enough and appropriate food. The food-insecure are less likely to be receiving medical care that meets minimum clinical practice standards with regard to number of recommended visits, tests and procedures to monitor HIV disease, and antiretroviral medication therapies as indicated (Table 2).

Food insecurity is associated with poor functional health and clinical markers of HIV

Study results also show that PLWHA who are food insecure score lower on standardized measures of physical health functioning, mental health functioning, and quality of life. They have lower CD4 counts and are less likely to have undetectable viral loads than the food secure (Table 3). Other research has shown that food insecurity is associated with increased morbidity and mortality among HIV infected persons.

Conclusions

Food insecurity has long been recognized as a serious problem for PLWHA in low-resource countries. There is ample evidence that food and nutrition issues are increasing among PLWHA in the U.S. as well. Given the broader economic downturn and multiple service cuts, the need for food and nutrition services among PLWHA would only be expected to increase over the next several years with deleterious consequences for individual health and well-being and for the continuing HIV epidemic and associated health disparities.

- Food insecurity or continued unmet need for food/ nutrition services is widespread and associated with poor engagement with HIV medical care and poor health outcomes
- Food and nutrition services are essential to promote treatment effectiveness and maintain health among PLWHA

This report was prepared by Angela Aidala with the assistance of Maiko Yomogida at Columbia University, in collaboration with an Advisory Group of food and nutrition service providers listed below. The CHAIN project is supported by HRSA grant HA00015. Funding for this report was provided by the MAC AIDS Fund.

Table 1. Use of food and nutrition services by PLWHA[1]

	NYC	TRI-CO
Total Sample (n=)	*(702)*	*(394)*
Food stamps	79%	63%*
Home delivered meals	3%	10% *
Meals in a group setting	38%	22%*
Food from a food pantry	34%	23%*
Nutritional counseling/ group presentation	23%	38%
Received any assistance with food or meals (other than food stamps) • Home delivered meals • Meals in group setting • Food from food pantry or • Other help with food or meals	55%	58%*

Table 2. Food insecurity and health care outcomes among PLWHA[1]

	Food INSECURE	Food SECURE
Total Sample (n=)	*(441)*	*(606)*
No visit with HIV primary care provider 6+ mos	3%	2%
Care does not meet minimal practice standards	36%	30% *
Missed 2+ scheduled medical appointments 6mos	28%	12%*
One or more ER visits past 6 months	34%	23%*
Any indicator of poor connection to medical care • No primary care visits • Care does not meet minimal practice standards • Multiple missed appointments or • ER visits	70%	60%*

Table 3. Food insecurity and health outcomes among PLWHA[1]

	Food INSECURE	Food SECURE
Total Sample (n=)	*(441)*	*(606)*
Low mental health score	53%	46% *
Poor physical health functioning	54%	46% *
CD4 T-cell count		
Below 200	22%	13%*
200-499	39%	42%
500 or higher	39%	45%
Viral load		
10,000+ or 'bad'	16%	10%*
9999- 400	9%	8%
Undetectable, below 400	75%	83%

1. New York City and Tri-County study participants interviewed in 2008-2010

* Statistically significant differences comparing NYC and Tri-Co cohort members (Table 1) or comparing Food-Insecure and Food-Secure cohort members regardless of residence (Tables 2 & 3).