

we will address the practical aspects. We illustrate these practical aspects by describing a model involving partnership between health practitioners from the Emmanuel Hospital Association of New Delhi, India (EHA) and university-based researchers from the University of Illinois at Urbana-Champaign (UIUC). We present an overview of our research project, which has the aim of measuring the prevalence of food insecurity among patients in an HIV and AIDS treatment and care program in New Delhi, India, and discovering the impact of food insecurity on health outcomes of the patients. We conclude the paper with some observations on partnerships based upon our experience to date.

### **1 A Rationale for Research Partnerships Between Christian NGOs and Academics**

As Christian researchers in the social sciences, what is our role? What is our purpose for working? Nicholas Wolterstorff (1983), in his book *Until Justice and Peace Embrace*, points to an important aspect of working as Christians. Speaking of the Calvinist's perspective of calling and occupation, Wolterstorff notes that the Calvinist "saw his occupation as something through which to exercise his obedience" (p. 16). This is in contrast to the "medieval" view of "remaining in that role" as what is to be done in obedient gratitude. Whether Wolterstorff is fair in his labeling, this is an important distinction to make. What we do in our occupations is just as important as—or more important than—the fact that we are in the roles, or even that we work in these roles to the best of our ability. The actions we take in our occupations are of utmost concern: "One has to see to it that one's occupation serves the common good rather than simply assuming it does."

Thus our occupations are intricately linked to the work that we do to further manifest God's kingdom in this world. However, we are not all called to the same work (Rom. 12:4). Each of us in the church is given a different calling, but one which is to reinforce, lift up, and enable the other parts of the church in their work. Our work is not for ourselves, but for the good of the body, the bringing of shalom to the very un-peaceful world, and ultimately, we pray, for God's own glory.

In this view, the participation of researchers with practitioners is our way, as those called to research and practice, of building each other up. Not only are we to encourage each other in our work, but enable each other to carry out the respective tasks God has called us to do more effectively.

*Practicalities and Programmatic Value*

Since participatory research needs to be others-focused, the overarching practical aspect is how to keep it this way. Thus a basic issue is deciding who will benefit from the research findings. The primary benefit from research cannot be simply another publication for the researchers, but must address the roles practitioners play in engaging the world. For example, if the participation is with health care workers, will the research enable them to better care for their patients? What specific steps will be taken to ensure that the opportunity for research to inform practice actually occurs? One means to strengthen the possibility of research informing practice is to involve a practitioner directly on the research team. We have chosen this structure for our research project.

An important issue which could prove hurtful to current and future relationships is publication authorship. Will the practitioners as well as the researchers be properly acknowledged on any publication as co-authors? There are clearly situations in which this may not be appropriate, but it would be better to err on the side of appreciation for the work of the practitioner than to risk misunderstanding and hurting the practitioner. Authorship is often a difficult subject, but one that needs to be addressed ideally even before the research begins.

A related issue is that of who owns the research. If the research is survey-based, will the practitioner be able to keep the surveys? Will they have ultimate say in what happens to the direct product of the research?

Often practitioners see the need for research activities. Thus a pertinent question is: If the practitioners are interested in building up their capacity for research, will they receive training which they could utilize for future research, program development and monitoring, and impact assessment activities of their own? Instead of making it necessary for the practitioners to work with outside researchers for every project, the researchers should work towards enabling the practitioners to conduct independent research. This consideration may not apply to every situation, but it cannot be ignored if researchers truly have the good of the practitioner in mind.

Since the research must enable the practitioner as he or she engages the world, issues arise with how research affects this engagement. In the case of health economics, researchers must think through how research and care build on each other. For instance, what if the research leads to the finding that someone is HIV positive or food insecure? Should the researchers alert the practitioners? Are the practitioners in a position to care for this person? Will the research truly benefit the practitioner, or will he or she simply be overwhelmed with the new work which the research has brought to light?

Thus, research in partnership with NGOs has the potential to serve and support evidence-based practice and programs. It can also assist the NGO in making a contribution to the formulation of public policy, if that is an organizational objective. Through involving NGO staff in the research process itself, research can serve to build skills in enquiry and problem formulation, data gathering and analysis, and communication. Lastly, the knowledge gained from research conducted *in situ* represents something of inherent worth as an informational public good. This can benefit the NGO, the communities it directly serves, as well as people around the world.

The difficulties in practical issues often stem from the differences between the environments and mindsets from which practitioners and researchers work. In general terms, NGOs work to deliver a program, act concretely, function under a set of organizational policies, value information for its contribution to the program, and communicate with program staff, the community, and donors. Academic researchers think more broadly and abstractly, value knowledge creation for its own sake, and target audiences such as disciplinary peers, policy makers, and donors (Roper, 2002). Given these differences, Garrett (2004) points out the need to identify shared interests between researchers and NGOs in the specific generation of new information and knowledge. To spot these shared interests, it is important to realize that different levels of the NGO may have very different values on knowledge creation and research-based information (Garrett, 2004).

In our project, bridging the NGO/academic researcher gap has been facilitated by EHA's organizational commitment to publishing (for its senior staff) and its previous experience in doing research in partnership with university-based researchers. EHA presently has a Memorandum of Understanding with a unit of Monash University in Australia and has had numerous short-term visitors on research projects at its facilities. In addition, a number of the senior medical staff and leadership of EHA maintain an interest in research, and EHA has recently established a research unit to conduct in-house studies of publishable quality.

## **2 The Research Partnership**

### *The NGO Partners: EHA and the Shalom Program*

The collaborators in this project are researchers with EHA and UIUC, as well as practitioners involved with the Shalom Program, Delhi. EHA is the largest non-government provider of health care in India, with 23 hospitals and 30 community-based projects in 13 states of India. EHA's comprehensive health services integrate essential clinical services with primary health care and community-level engagement in order to address

the health priorities of people in rural areas. Established in 1970, EHA has a thirty-five year history of holistic work. The primary focus of EHA is to provide care for the poor, who account for approximately thirty-five percent of the population of seven million that EHA serves. EHA serves this population through health, development, HIV/AIDS, and disaster programs, and investing in the health and well-being of the poor. EHA works in partnership with the communities, governments, and community-based organizations and NGOs both nationally and internationally to deliver services effectively and efficiently.

Each hospital of EHA is a separate registered charitable society which has entered into a Deed of Incorporation with EHA and each other. EHA's diverse clinical services include obstetrics and gynecology, ophthalmology, general and family medicine, pediatrics, general and pediatric surgery, urology, dentistry and diagnostic services including clinical laboratories, radiology, ultrasonography, and gastroscopy.

Over the last 30 years, EHA has developed considerable expertise in managing hospitals both in towns and remote locations of rural India. It developed its first master plan for the development of these hospitals in 1970. In 2001, EHA undertook a strategic review of its entire organization and developed master plans for each of its hospital units. Besides these steps forward, EHA has been constantly working towards developing financial systems and infrastructure, including buildings, medical equipment, and human resources development. EHA has undertaken a number of operations research projects and has a number of staff trained in healthcare management, financial management, and health economics. It has also acquired expertise in computerized hospital management systems.

Shalom Delhi is an HIV/AIDS program of EHA that provides medical care and home support to a diverse group of patients from Delhi and neighboring states. The project's mission is to provide continuum care to those infected with HIV and support to their families. The medical care is provided in Shalom's facilities to outpatients and inpatients by a team of two doctors and a number of dedicated nurses. In addition to the usual patients, Shalom provides medical support to inmates of a drug rehabilitation center and an orphanage with HIV-positive children. The home care program provides compassionate support to families affected by HIV/AIDS, and provides food and money when needed. In order to provide even greater support to families affected by HIV/AIDS, Shalom is active in mobilizing churches to care for a few of these families. In addition to these areas, the project is involved in education and prevention, providing training for workers from other NGOs as well as offering a multi-week class for the children of HIV-positive parents.

*The EHA and UIUC Research Project on HIV/AIDS and Food Security*

One model for researcher-practitioner partnership is that of the cooperation between researchers from UIUC and medical practitioners from EHA. The goal of the project is to study food security and its relationship to health outcomes among those who are living with HIV/AIDS. The partnership entails regular communication between the parties regarding the progress and results of the survey. The survey was written from input by both parties in order to ensure its relevance to the situation of Shalom and its patients. One UIUC graduate student worked directly with a Shalom staff member to gather the surveys and keep the EHA and UIUC researchers apprised of the progress and difficulties in the data gathering process. Shalom has retained all the survey forms; UIUC researchers can take and analyze the data only in electronic form. While several drafts of papers have been completed and are under review at medical and social science journals, future publications are envisioned with varying degrees of contribution from each of the research partners in journals that speak to their expertise. In addition, it is hoped that Shalom will be able to use the survey data to better inform the project regarding the future direction of food assistance programs.

To investigate the links between food insecurity and health outcomes for HIV and AIDS patients, the study uses a prospective cohort analysis with a survey that includes information from the respondent as well as information from the medical chart. The survey is fielded twice in order to gain measures of changes in health status and food insecurity along with other covariates over a six-month period. The research protocol and the survey instrument have been approved by the Institutional Review Board at UIUC as well as the Research Board of EHA. While we had originally hoped that the first wave of the survey would have between 300 and 400 respondents, we ended up with about 250 respondents. The second wave of the survey will be fielded after a period of about six months, during a subsequent clinic visit of the respondents to the first wave. The survey was available in both English and Hindi and was offered in the preferred language by a trained enumerator.

A key lesson that has been learned thus far is that communication between the researchers and practitioners is very difficult. Part of this difficulty arises from the distance that separates the two. The distance determines email as the primary form of communication. In India, however, access to an internet connection is not guaranteed, and so the amount of time between emails can be quite substantial.

Another part of the difficulty in communication arises from the differing backgrounds of the two groups participating in this research.

The researchers are economists, whereas the practitioners are trained as physicians. A result of this difference is that the two come to the research with differing ideas of what “research” entails. The physicians have experience with research that involves treatment groups and control groups, whereas the economists have experience with research that controls for factors with regression analysis. These differences create misunderstandings and communication barriers when discussing the proposed methodology for the project. For example, each has different ideas regarding the time frame of the study, in particular the second round of the survey.

### **3 HIV/AIDS and Food Security Research Overview**

#### *HIV and AIDS in India*

According to the latest Indian National AIDS Control Organisation/UNAIDS estimates (UNAIDS, 2007), India has approximately 2.5 million people living with HIV infection. The majority of the infections are found in six states, mainly in the south, west, and northeast. While the epidemic appears to have declined slightly in the south, there is no evidence to suggest such a decline in the north (UNAIDS, 2006). Thus, the challenge of HIV/AIDS cannot be underestimated.

A key source of infection appears to be transmission from regular sexual partners who acquired the disease from paid sex. As a result, a significant proportion (38.4%) of the infection is occurring among women (National AIDS Control Organization, 2006). HIV prevalence rates among paid sex workers are high, at least in certain portions of the country. Injecting drug use also plays a significant role in transmission, particularly in portions of northeast India and in major cities (UNAIDS, 2006).

The first report of HIV in India came in 1986 when a few female commercial sex workers in Chennai were tested positive. The initial response was rather lethargic, and it took a year for the National Aids Control Programme (NACP) to be launched. The initial activities included some sero-surveillance, screening of blood products, and health education. There was no clear strategy and the whole response was inadequate in scale to the problem. Since then two phases of the NACP have been completed and currently the Government is implementing the third phase (NACP-III).

The NACP-III 2006–2011 has just been launched and is designed around a number of key principles. First is the Three Ones Principles promoted by UNAIDS to encourage countries to develop one single national mechanism for AIDS co-ordination, one national AIDS strategy, and one monitoring and evaluation framework for AIDS responses.

Another principle of NACP-III is participatory planning, which includes the involvement of stakeholders in the design process to increase the ownership across the various sectors of the society at all levels.

The NACP-III broad thrust areas include: building on the gains of the NACP-II and reaching out to the district and sub district level; priority for prevention and strengthening care, support, and treatment; increased focus on vulnerable states and northeast states; improving service delivery; and mainstreaming and partnership.

In addition to the government responses to HIV/AIDS, the NGO sector has focused on three approaches: prevention strategies; care, support, and treatment; and cross-cutting strategies.

NGOs involved in prevention have adopted a number of interventions ranging from general awareness building campaigns to targeted interventions focused on the risk practices of commercial sex workers, injecting drug users, truckers, and migrant workers. The focus has been on prevention of sexually transmitted diseases, condom promotion, sexual health, and a wide range of communication strategies.

Under the care, support, and treatment interventions, many of the NGO efforts have been in the area of counselling. Various forms of counselling services have been offered—supportive counselling, family counselling, and crisis counselling. Some of the NGOs have provided treatment for opportunistic infection, and only a few NGOs have gone on to provide anti-retroviral therapy (ART) and Preventing Mother to Child Transmission of HIV (PMTCT), largely over the past five years. Some agencies have provided nutritional support, especially for widows and orphans.

The cross-cutting strategies that NGOs have been involved in are varied. Cross-cutting strategies attempt to address the underlying socio-economic and cultural factors that provide the environment for the rapid spread of the HIV infection. Many NGOs have been involved in women's empowerment programs and in those that deal with gender issues. These include interventions like women's literacy, self-help groups, and adolescent girl programs. Others have looked to deal with migration through various livelihood initiatives. There have been rights-based approaches focusing on the rights of People Living with HIV/AIDS (PLWHA) and also women's rights seeking to address the problem of gender disparity. Some workers have tried to work with female commercial sex workers seeking to empower them. For example, the Sonagachi Project in Kolkatta has met with some success (Jana, Rotheram-Borus, & Newman, 2004).

Many programs have focused on harm reduction in areas of high numbers of people with substance abuse, especially in the northeast of India. These include strategies like needle exchange programs. The

Shalom project that was initiated by EHA has caught worldwide attention and provided a model for other NGOs. The involvement of PLWHAs in the planning and implementation of HIV-AIDS programs in India has been a more recent trend.

*Food Security and HIV/AIDS Care and Treatment Research*

Much of the increased attention to nutrition in the context of HIV and AIDS at the present time is being driven by the reality of HIV and AIDS in resource-poor countries with relatively weak care and treatment programs, chronic poverty and malnutrition, and limited access to anti-retroviral treatments, particularly for second-line drug regimens. Previous research has illustrated that HIV positive patients or patients with AIDS often also have macro and micro nutrient malnutrition. For example, Semba and Tang (1999) report that HIV infection can lead to nutritional deficiencies through a decline in food intake, malabsorption of nutrients as well as increased nutrient use and excretion of nutrients due to the illness.

The nutritional deficiencies can have drastic consequences. Semba and Tang (1999) note poor nutrition may hasten the onset of AIDS. Likewise, Beisel (1996) reports nutritional status affects the immune response to HIV infection, and poorer nutritional status is associated with poor clinical outcomes for patients. Biesel (1996) further notes the similarity between the immune suppression caused by malnutrition and the HIV virus.

The adverse health outcomes experienced by those with HIV/AIDS can often be attributed to weight loss and wasting. Piwoz and Preble (2000) note that “[e]ven relatively small losses in weight (5 percent) have been associated with decreased survival in people with AIDS and are therefore important to monitor....” Attempts to counteract wasting have focused on appetite stimulants, hormone treatment, and various dietary supplements and nutritional counseling (Piwoz & Preble, 2000). However, many of these therapies are expensive and less is known about the effectiveness of such interventions in resource-poor settings. One significant exception is the research into nutritional supplements offered by Catholic Relief Services to some households in Zambia. Using a quasi-experimental study design, Egge, Campbell, Senefeld, Strasser, and Lovick (2007) report a significant improvement in the physical and mental quality of life measures of PLWHA, as well as some anthropometric measures, which they attribute to the nutritional supplements.

In addition to the problem posed by weight loss and wasting, malnutrition can cause a deficiency of micronutrients, which can also have a marked affect on health status. A number of studies have examined

the link between variation in micronutrient nutrition and health status for PLWHA. However, in their review of nutrition in the context of HIV/AIDS, Gillespie and Kadiyala (2005) find that variations and limitations in study designs have made drawing conclusive findings from the existing HIV micronutrient studies difficult.

While much research has focused on nutrition and health outcomes at the micro level, at the level of macro nutrition, food security indicators, and dietary intake, the research base reported in scientific journals is sparse. Food insecurity is defined as the limited or uncertain availability of nutritionally adequate, safe foods or the inability to acquire personally acceptable foods in socially acceptable ways (Anderson, 1990).

One exception to the general paucity of research on food insecurity is a survey conducted in 1998–99 among patients in the British Columbia HIV/AIDS drug treatment program (Normen et al., 2005). The study utilizes the Radimer/Cornell questionnaire to obtain a measure of food insecurity among 1213 respondents from this patient population. The analysis revealed that 52% of the respondents were classified as food secure, 27% as food insecure without hunger, and 21% as food insecure with hunger. That means that “in HIV-positive individuals, the occurrence of food insecurity was nearly 5 times higher than in the general Canadian population.” This leads the authors to recommend additional research to identify both effective programmatic responses based upon social or nutritional interventions as well as the factors that determine food insecurity and hunger among HIV-positive individuals. To our knowledge, however, there are no studies in the journal literature that examine the prevalence of food insecurity among people with HIV/AIDS in the global South or in contexts with high levels of chronic malnutrition, such as South Asia or Sub-Saharan Africa.

While there are notable exceptions such as those seen above, there is generally little research on food assistance and food security among those with HIV/AIDS. Thus, Egge and Strasser (2006, p. 306) argue for the importance of building an evidence base regarding the contribution of food assistance and food security to the quality of life and health status of people living with HIV/AIDS. They also lament the “paucity of studies addressing targeted food aid (TFA) to people living with HIV/AIDS and almost complete lack of documentation on measuring the impact of food aid on PLWHA” (p. 307). Furthermore, they note the need for practical assessment tools to measure the impact of TFA on households and nutritional outcomes for PLWHA and the fact that such assessment tools are not “widely available” (p. 307). Egge and Strasser detail a number of

anthropometric measures that an assessment framework might include and they highlight the need for additional indicators beyond the anthropometric measures, such as ART adherence, diarrhea prevalence, and quality of life, among others.

### *Measuring Food Insecurity*

As indicated by the definition above, food insecurity represents a very complex issue, and has been measured in many different ways. In order to more fully capture food security as well as to allow comparison across measures, we included three different measures of household food security in the survey. Each of the measures was developed by the USAID-funded Food and Nutrition Technical Assistance (FANTA) Project of the Academy for Educational Development. The measures were developed to meet the need for a simple yet rigorous way to evaluate the impact of USAID Title II programs.

The first measure in the survey is the Household Food Insecurity Access Scale (HFIAS). The HFIAS is an adaptation of the U.S. Household Food Security Survey Module (US HFSSM), which is an eighteen question survey that elicits responses describing the behaviors and attitudes of respondents relating to different aspects of the food insecurity experience. Field testing the US HFSSM approach in developing nations, and using and adapting the revised versions in developing nation contexts, resulted in a nine question survey covering three aspects of the food insecurity experience. The three domains covered by the HFIAS are: anxiety and uncertainty about household food access; insufficient quality; and insufficient food intake and its consequences (Swindale & Bilinsky, 2006a).

The HFIAS asks respondents to recall how often in the past 30 days their households experienced a particular dimension of food insecurity. First a response is elicited based on whether the household experienced the dimension at all. If it was experienced, the enumerator follows up by having the respondent choose whether the dimension was experienced rarely, sometimes, or often. Rarely is defined as once or twice in the past 30 days, sometimes is defined as three to ten times, and often is defined as more than ten times. The answers can then be summed to yield a score, or the household can be placed in one level of food security (food secure, mildly food insecure, moderately food insecure, and severely food insecure) based on the responses to certain questions (Coates, Swindale, & Bilinsky, 2006).

The second measure of household food security is household dietary diversity. The Household Dietary Diversity Score as developed by FANTA consists of a 24-hour recall of the different food groups which were

consumed by the participant or any other member of the family. Using the input from EHA staff, we adapted the food prompts to the north Indian context. We did not restrict the question to food prepared and eaten in the home or by household members outside the home, which as Swindale and Bilinsky (2006b) point out might overestimate the household's dietary diversity. An indicator can be computed by simply summing the number of food groups, yielding a maximum score of 12.

The last measure of household food security is months of inadequate household food provisioning. The respondent is asked to recall whether there were months within the past 12 months in which they did not have enough food to meet the family's needs. If so, the enumerator follows up by asking about which months the household experienced these shortages. Then the enumerator asks about the strategies the household utilized to obtain food during these periods of shortages within the past year.

#### **4 HIV/AIDS and Food Security Research Project**

##### *Study Survey*

The survey was fielded during an encounter with a Shalom program patient at the clinic in Delhi or during a home-based care visit. The survey instrument first gathered data from the medical record concerning medical information such as the date of the initial diagnosis, anthropometric data, stage of illness, CD-4 count (if available), antiretroviral drug therapy use and history, and a description of opportunistic infections. Then the study participant was asked a set of questions regarding his/her living situation, economic and social situation, food security status, mental health status, and health status. The food security questions used were the Household Food Insecurity Access Scale, the Dietary Diversity Score, and the recall of food shortages over the past year. The survey took roughly 30 minutes of the participant's time to field.

##### *Preliminary Results*

The fielding of the survey began in April 2007, and through mid-June 2007 a total of 80 completed survey forms were available for initial analysis. The preliminary results reported here should thus be viewed as qualitative results which point to phenomena that a greater sample size may bear out or may change.

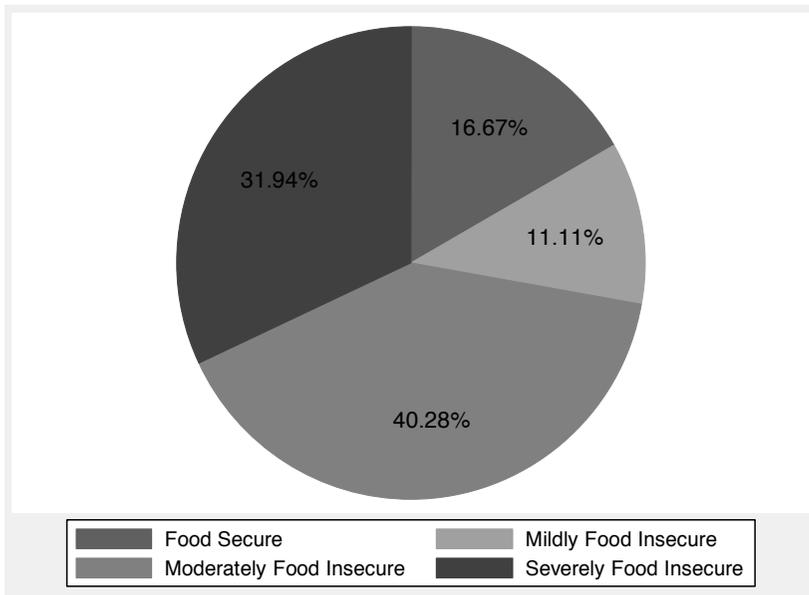
Regarding the Household Food Insecurity Access measures, recall that respondents are categorized into one of four groups depending on the responses to the nine questions. Figure 1 shows the distribution of the initial respondents into the four food security classes. Of the 72

respondents with sufficient information to complete the Household Food Insecurity Access (HFIA) measure, 23 (32 percent) fell into the Severely Food Insecure Access group, and another 29 (40 percent) were classified into the Moderately Food Insecure Access group. The remaining 28 percent fell into the Mildly Food Insecure Access group (11 percent) and the Food Secure (17 percent) group.

While the classifications utilized here are different from those employed by Normen et al. (2005) in their study of food insecurity among HIV-positive individuals in British Columbia, Canada, these preliminary results appear to indicate a significant level of food insecurity among the patients surveyed. A simple regression of the Household Food Insecurity Category on the asset index variable (measured as the sum of 11 possible assets a household might own) showed a negative (and statistically significant) relationship between an increase in assets and the severity of food insecurity.

Depression and mental health status constitutes an important dimension of health status for people living with HIV and AIDS. To measure mental health status and depression, we include the questions for the K-6 depression scale on the survey. Answers to the six questions use a five point scale, with the larger value representing more severe indications of mental illness. To score the summary measure, one simply sums the

**Figure 1: Household Food Insecurity Access for 80 Delhi HIV and AIDS Patients**



responses to the six mental health questions. A cutoff value of 13 or greater is used to indicate mental illness. Among the 76 usable observations in this preliminary data, roughly 45 percent fell in the range of 13 points or greater.

A simple linear regression of the K-6 non-specific serious mental illness scores (with values ranging from 0 to 21) on the Household Food Insecurity Access indicators reveals a positive (and statistically significant) relationship. The K-6 measure has been developed for use in population surveys to screen and identify the prevalence of serious mental illness and it has been applied internationally (Kessler et al., 2003). Thus, higher levels of food insecurity are associated with higher scores (greater frequency of a score in the depressed range) on the K-6 scale. This positive effect of food insecurity on depression for people living with HIV and AIDS remains when the Asset Index variable is added to the regression. This suggests a hypothesis of a unique protective aspect of food security on the mental health status of program clients, in addition to the protective effect of higher assets. While investigating this hypothesis and other related hypotheses regarding the specific role of food security in the treatment and care of persons with HIV and AIDS waits for the entire study data to be collected, the hypothesis does appear important for those policy makers interested in evidence regarding the provision of targeted food assistance to people with HIV and AIDS.

The questions regarding food shortages revealed that 16 of 76 respondents (21 percent) reported having at least one month in the past year without enough food. In terms of the 24 hour recall question on household dietary diversity, of 76 respondents answering the questions, 40 percent reported someone in the household consuming six items, and an additional 25 percent reported someone eating 7 items. Only 16 percent of respondents reported someone eating 5 or fewer food commodities or groups. Further analysis will be needed to assess the specific food commodities eaten and their frequencies among this population. This information may allow nutritional assessment for the overall balance of the dietary intakes of the respondents. In addition, it may be possible to test Engel curve relations between income (asset levels) and the intake of specific food groups used in the dietary diversity scores.

## **5 Conclusion**

Conducting research in a partnership between NGO practitioners and academic researchers is not easy. The environment that an NGO such as EHA's Shalom program operates in is inherently difficult. Nonetheless, a research effort, if value is seen from all of the partners, can potentially

yield information and knowledge that can affect development or health practice as well as generate a scholarly contribution. Our collaboration has identified a research question where the answer may contain implications for EHA's programming in the area of HIV and AIDS, as well as to national and international food policies in the context of HIV and AIDS. In addition, enquiry at the nexus of food security and HIV and AIDS may yield a scholarly contribution to the literature on nutrition and HIV and AIDS.

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