Food security and nutrition vulnerability assessment among people living with HIV in South Sudan

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Introduction:

South Sudan is one of 30 countries which accounts for 89% of new HIV infections globally. In 2017, there were approximately 15,220 new cases of HIV infection, 12,130 AIDS related deaths and over 204,000 people living with HIV (UNAIDS, 2017). Although the national prevalence among adults aged 15 to 49 years is estimated at 2.7%, the geographic distribution is concentrated mainly in three former states of Central Equatoria (2.6%), Eastern Equatoria (3.4%) and Western Equatoria (6.8%).

Households of People Living with HIV (PLHIV) are among those most affected by the persistent conflict, displacements, poverty, food insecurity and malnutrition in the country. The ongoing conflict continues to have an adverse effect on the HIV response; displaced populations, refugees, internally displaced persons and returnees are not always able to adequately access regular HIV care, support and prevention services.

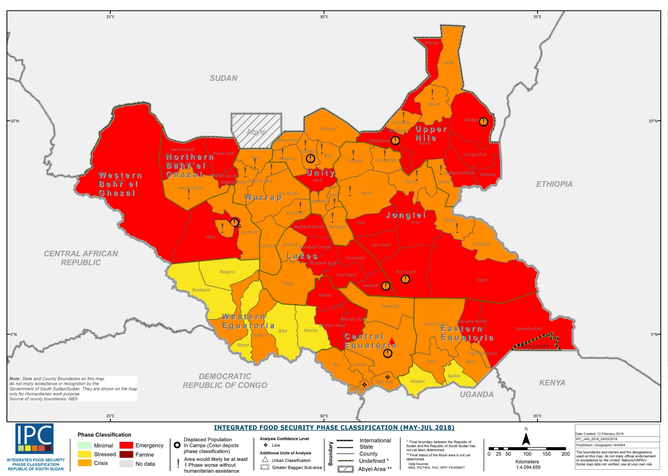
In South Sudan, Global Acute Malnutrition (GAM) rates are above emergency thresholds[1] and an estimated 5.3 million people (48% of the population) are food insecure. Both malnutrition and food insecurity contribute to an increased HIV associated morbidity and mortality rate. This vulnerability assessment was conducted to provide reliable national data on food security and nutrition among households affected by HIV in order to inform appropriate responses, policy and advocacy efforts.

Materials and methods:

Qualitative and quantitative data was collected from households of PLHIV in seven[2] of the 10 former states of South Sudan, using a two stage cluster sampling method. Three[3] of the 10 former states were involved in major conflict at the time of the survey thus rendering them inaccessible for the exercise.

Study inclusion criteria included PLHIV aged above 15 years that were 1) on ART, 2) not yet on ART treatment; regardless of TB status. The Consolidated Approach to Reporting Indicators for food security (CARI) guidelines and standardized questionnaire were used to measure the degree of food insecurity. Nutritional status was assessed using Body Mass Index (BMI; adult malnourished <18.5kg/m²) and Mid Upper Arm Circumference (MUAC; adult malnourished <23.0cm). Key informant interviews (KIIs) were conducted with PLHIV, policy makers and other stakeholders involved in the HIV response.

The survey team members were trained on the study purpose and design and pretested the survey tools prior to the onset of the study. Each survey team included a PLHIV that was known among the PLHIV community in the respective area of the survey. Data was analyzed using IBM SPSS software for statistical analysis. Ethical approval was granted by the Director of Policy, Planning, Budgeting and Research at the Ministry of Health of the Republic of South Sudan. Participation in the assessment was voluntary following an informed consent procedure.



Results:

Of the 933 respondents, 240 (26%) were male and 693 (74%) were female. The majority of the household heads (77%) were PLHIV, 44% were headed by women and most of the respondents (80%) had known their HIV status for more than one year.

Table 1: Socio-demographic characteristics of respondents

Variable	n	%
Duration (yrs) of knowing HIV status		
Less than 1 year	186	19.9
1-4 years	375	40.2
5-9 years	300	32.2
More than 10 years	72	7.7
Education Level		
No formal education	391	41.9
Primary school education+	542	58.1
Relationship Status		
Married/Cohabiting and living together	400	42.9
Not in relationship	336	36.0
Widowed/divorced/separated	44	4.7
Other	153	16.4
Gender of the head of the household		
Male	519	55.6
Female	414	44.4

The findings of the survey indicated that 41% of the PLHIV households were food insecure – severely food insecure (1.7%) and moderately food insecure (39%). A significant proportion of households (60%) relied on unsustainable sources of food including remittances, begging and the sale of natural resources and alcoholic beverages. One in three PLHIV households consumed less than the recommended four food groups. The factors affecting food security included: nutrition and health status of PLHIV (OR=1.8), ability to engage in agriculture (OR=1.8), stigma and discrimination (OR=1.8). Households headed by PLHIV had a 70% higher chance of being food insecure, compared to those headed by non PLHIV. The prevalence of undernutrition (wasting) among PLHIV based on BMI was 26.2% and 19.7% based on MUAC. The risk of wasting was significantly higher among households that were: female headed (OR=1.5), hosting an orphan (OR=1.4), food insecure (OR=1.8), consumed less diverse diets (OR=1.8) or those with a lower wealth index. Stigma and discrimination also significantly contributed to wasting (OR=1.8).

Conclusions:

This is the first study covering more than one state that assessed the food security and nutrition situation of households affected by HIV. The study serves as a baseline for subsequent related surveys to monitor trends of vulnerability to food insecurity and undernutrition among PLHIV and their households. The food security and nutrition situation of the PLHIV in South Sudan is alarming. PLHIV headed households had an increased risk of food insecurity compared to those headed by non PLHIV.

Various factors influence the food security and nutrition status of PLHIV and their households including demographic, health, social-economic factors, and stigma and discrimination, whilst nutrition and food security affected each other. A large proportion of PLHIV are food insecure whilst nearly half of the PLHIV households experience inadequate food consumption and poor dietary diversity. Wealth plays a key role in ensuring household food security and nutrition; households with more assets/high value assets had better food security and nutrition outcomes. Households experiencing shocks mainly related to the current economic crisis were more likely to have lower nutritional status. PLHIV households that engaged in crop and animal production registered better food security and nutrition outcomes.

Efforts should be made to support improved care and treatment of PLHIV. Special consideration should be made to provide food and nutrition support for PLHIV on ART and those with limited work ability or bedridden. Since female headed households or those hosting orphans were more likely to be food insecure or have an undernourished PLHIV, these household vulnerability characteristics should provide useful targeting criteria for livelihood and other support programmes for PLHIV.

The findings triggered a revision of the WFP food and nutrition strategy for HIV & TB programming in South Sudan which is now aligned with national and global policies.

[1]Emergency GAM thresholds as defined by WHO; >15%
[2]CES, EES, Lakes, NBeG, Warrap, WBeG, and WES
[3]Jongeli, Unity, and UNS