**Background**

Malnutrition is prevalent among PLHIVs & it negatively affects treatment outcome. (A. Abebe, MD, MPH)

USAID/Food by Prescription program is implemented by Save the Children Int. and it is working to integrate Nutrition ‘Assessment’, ‘Counseling’ and ‘Support’ (NACS) in the comprehensive HIV care.

In USAID/FBP implementing health facilities, PLHIVs access lifelong NACS service through three Nutrition Care Plans; CP-A, CP-B & CP-C.

Severely malnourished adults are enrolled in CPA & are supported with RUTF (4 sachets per day for a total of 2-3 months). The current study builds upon work of other studies (Abebe et al., 2015; Andu & Gebretsadik, 2016; Abebe, 2017; Gebretsadik et al., 2017).

Evidences on how adult PLHIVs with severe malnutrition respond to different nutrition supports are only coming.

This study is done with the objective of investigating effectiveness of CPA RUTF dose as practiced in Ethiopia.

**Methodology**

A quantitative study with cross sectional design is used. Cluster sampling method was employed & a total of 207 health facilities, 70 were selected.

A total of 755 severely malnourished PLHIVs enrolled in the selected facilities constituted the study population of whom 60.1% were female.

‘FBP Client Follow Up Registration Books’ were the data sources.

As adherence to the prescribed food could not be ensured, the study was done on an ‘intention-to-treat’ basis.

Data entry and analysis was done by using Excel-2007 & SPSS-16

**Results**

1. Improvement in nutrition status

<table>
<thead>
<tr>
<th>A. Change in average weight and BMI</th>
<th>B. Average ‘weight’ and ‘BMI’ gains</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Admission</strong></td>
<td><strong>After one month</strong></td>
</tr>
<tr>
<td>Average weight</td>
<td>39.2 kg</td>
</tr>
<tr>
<td>Average BMI</td>
<td>15.2 kg/m²</td>
</tr>
<tr>
<td>Weight change</td>
<td></td>
</tr>
<tr>
<td>BMI change</td>
<td></td>
</tr>
</tbody>
</table>

2. Factors associated with nutrition improvement and outcome

<table>
<thead>
<tr>
<th>A. ‘BMI level on admission’ is correlated with ‘subsequent BMI levels’</th>
<th>B. ‘Rate of weight gain’ is correlated with subsequent BMI levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clients enrolled with ‘higher’ BMI tend to have higher BMI on subsequent visits</td>
<td>Clients with higher percent of weight gain tend to have higher BMI on subsequent visits</td>
</tr>
</tbody>
</table>

**Conclusion and Recommendations**

- The overall performance of the care looks good; the median weight gain of 9% in this care is close to the 10% threshold (this is assumed to be a nutrition reconstitution threshold for some studies).
- Clients with higher ‘BMI’ tend to have higher BMI on subsequent visits - Hence, early diagnosis and management of malnutrition will make the care more effective.
- Clients with higher percent of weight gain tend to have positive outcome - Further investigation is needed to identify the types of clients that are likely to have rapid weight gain.
- For lack of agreed standards, the acceptability of improvements brought by this care cannot be fully determined - Multinational studies are needed to make comparisons & set standards.

**Disclaimer**

This content of this analysis is the responsibility of Save the Children and does not necessarily reflect the views of USAID or the United States Government.

**Acknowledgments**

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