

Nutritional Progress Of Severely Malnourished HIV Positive Adults on Clinical Nutrition Care In Ethiopia

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Background

Malnutrition is prevalent among PLHIVs & it negatively affects treatment outcome.
(E.g. PLHIVs with severe malnutrition have an up to five times increased risk of death within 3 months of starting ART.)

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 multi-national practice is through the use of two food commodities; Fortified-Blended-Food (FBF) and Ready-to-Use-Therapeutic-Food (RUTF). For the lack of FBF, facilities in Ethiopia are forced to use RUTF only.

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 & from 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



"The health worker informed me after assessing that I am weighing only 32 KGS with 15.8 BMI. I was prescribed to take plumpy'nut (RUTF) with my medicines. Gradually, I gained weight actually within few months and my general health has improved. Had it not been for the therapeutic food support, I might not have won the fight". (Andu Gebretsadik, 50, Dire Dawa, Ethiopia)

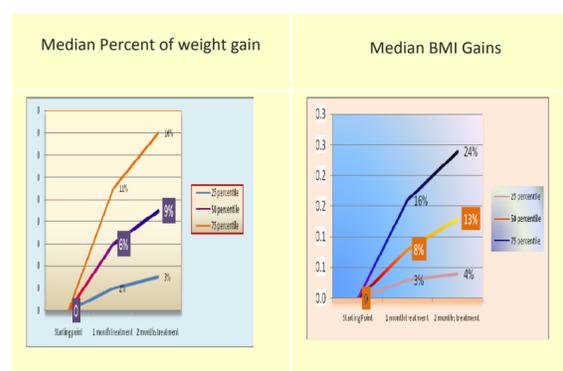
Results

1- Improvement in nutrition status

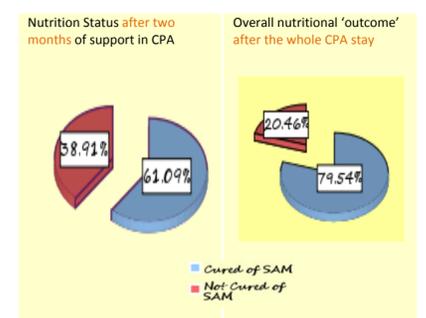
A- Change in average weight and BMI

	Admission	After one month of nutrition support in CPA	After two months of nutrition support in CPA	After three months of support (for some clients remaining in CPA)
Average Weight	39.23 kgs	42 kgs	43.15 Kgs	41.3 Kgs
Average BMI	15.2 kg/m ²	16.1 kg/m ²	16.4 kg/m ²	15.6 kg/m ²
Weight Change				
BMI Change				

B- Average 'weight' and 'BMI' gains



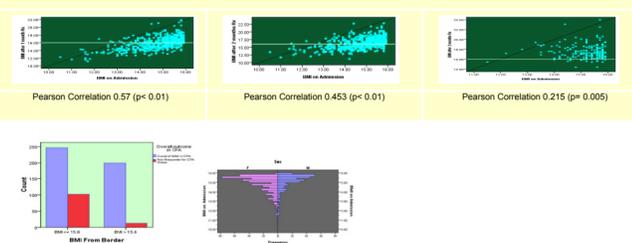
C- Change in nutritional status



2- Factors associated with nutrition improvement and outcome

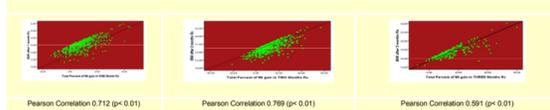
A- 'BMI level on admission' is correlated with 'subsequent BMI levels'

Clients enrolled with 'higher' BMI tend to have higher BMI on subsequent visits



B- 'Rate of weight gain' is correlated with subsequent BMI levels-

Clients with higher percent of weight gain tend to have higher BMI on subsequent visits.



C- Other Factors:

There was no enough evidence to suggest association of the 'outcome' with 'Sex', 'Region' or 'Age' of clients (p > 0.05).

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' (that is assumed to be a nutrition reconstitution threshold in some studies). Moreover, 79.54% of the clients were out of severe malnutrition at the end of their CPA stay.
- Clients enrolled 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

The contents of this study is the responsibility of Save the Children and do not necessarily reflect the views of USAID or the United States Government.

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