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CASE STUDY

Integrating nutrition services in HIV and TB care in Karonga and Balaka Districts of Malawi

With support from the United States Agency for International Development (USAID), health workers in Karonga and Balaka districts are reaching people with HIV and TB with a critical new service— nutrition assessment, counseling and support. By introducing three simple changes – 1) conducting nutrition assessment during registration before the client sees a health worker, 2) teaching clerks, assistants and other staff to help take arm circumference measurement, and 3) creating new data forms to track nutritional assessment – Karonga Hospital increased nutritional assessment from only 4% of clients visiting the HIV clinic to 98% in nine months.

Background

Nutrition and HIV are related in different, complex ways. Nutrition affects the wellbeing of people living with HIV. Poor nutrition worsens the effects of HIV by further weakening the immune system, which can lead to a more rapid progression of the disease. Food and nutritional intake affect adherence to antiretroviral drugs (ARVs) as well as their effectiveness. Food insecurity and inadequate knowledge of good nutrition impedes HIV patients' ability to manage their disease, particularly in resource-constrained settings like Malawi. HIV, for its part, interferes with the body's ability to access, handle, prepare, eat, and digest nutrients, thus increasing the risk of malnutrition.

In Malawi, the Ministry of Health (MOH) established the Nutrition Care, Support and Treatment (NCST) programme in 2005 to provide support for the people living with HIV. Over time, the NCST programme became inactive and lacked support. There was no data on the number of people requiring Ready to Use Therapeutic Food (RUTF). Because of this, it was hard for the Nutrition Department to quantify RUTF needs or to request a budget to purchase the RUTF. Because RUTF supplies were inconsistent, health workers were not assessing the nutritional status of their patients.

In March 2013, the USAID Applying Science to Strengthen and Improve Systems (ASSIST) Project began working with the MOH to improve nutrition assessment, counselling and support in HIV care in eight health facilities in Karonga and Balaka districts. The aim was to integrate nutrition care as a routine service within the HIV and TB services.

Karonga District Hospital

Karonga District Hospital is one of the eight facilities that are working to improve integration of nutrition services into HIV and TB care. The hospital serves a population of 55,675 people and also serves as a referral facility for all of the other 18 facilities in the district. The hospital provides many services for people living with HIV and also has a NCST programme. Since the hospital began participating in the improvement work with ASSIST in March 2013, nutrition assessment has been provided as a routine service for all HIV-positive clients. It took a multi-disciplinary team of health workers at the hospital to make three major changes to how they did their work, in order to institute assessment as a routine service.

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These include:

1. Changing the point of assessment. They started conducting nutrition assessment during registration, before the client was referred to see the clinician or nurse. Unlike before March 2013, when assessment was done after medical examination by the clinician.
2. Task-shifting. They assigned and trained Health Surveillance Assistants and nontraditional staff such as clerks and hospital servants/maids to take anthropometric measurements to assist with assessing clients.
3. Created data collection forms and registers. Before March 2013, routine assessments were not being done and there was no data on such. Only clients who were very sick and were admitted in the nutrition treatment program had their nutrition status assessed and documented. The team at the hospital decided to create a form where they would document client's information on assessment. They also improvised a register to keep the client details in service point where the form was not necessary. In this way, data was organized and it was easy to know how many clients were being assessed.

In January 2013, the hospital provided assessment to 35 (4%) of the 1,035 clients visiting the HIV clinic, but by October 2013, after making those changes, the hospital was providing assessment to 1,737 (98%) of the 1,781 clients visiting the HIV clinic.

A patient's story

In March 2013, Raphael visited Karonga District Hospital where he got tested and was found to be HIV-positive. He was enrolled in the HIV care clinic where he started receiving co-trimoxazole and nutrition counselling. In April 2013, he got very sick and severely malnourished such that he had difficulties to walk by himself. His wife and relatives took him to the hospital to receive medical treatment. When they arrived at the hospital, he underwent a routine nutrition assessment which found that his nutrition status was very severe. His weight was 40.8Kg and he had a Body Mass Index (BMI) of 13.3. A normal person has a BMI of 18 and above. He then went through a series of medical examinations and was admitted into the ward for treatment and close monitoring.

The clinician at the hospital recommended that Raphael's nutrition status should first be stabilized before the hospital could initiate him on anti-retroviral drugs (ARVs). Raphael then began receiving RUTF to treat his malnutrition. During the time he was in the ward, he ate the recommended six sachets of RUTF per day. His weight began to improve. After one month his weight was 48kg, and his BMI had increased to 15. Three months later, he was discharged from the nutrition program. On the day he was discharged, his weight was 60kg and his BMI had increased to 18.9. During this time he and his wife were receiving counselling on good nutrition practices so they could maintain their health at home. Raphael was weighed and received a supply of RUTF every



Figure 1 Raphael with a health worker

"I have benefited a lot from nutrition services provided at this facility. I am HIV- positive and on TB treatment, I had a very poor appetite and could not eat anything. As a result I lost a lot of weight and got malnourished. The hospital personnel started giving me Chiponde (RUTF). They also gave me and my wife a lot of counseling on good nutrition. This has helped me to improve my nutrition status and to look healthy as I am today. I thank the hospital staff and my wife for encouraging me to take the RUTF and keep eating other nutritious foods because that has improved my life." - Raphael

fortnight. After his nutrition status was stabilised and he was healthy and normal, he was then initiated on ARVs.

Results

The MOH, with support from the USAID ASSIST Project, continues to support the eight facilities to ensure that they improve integration of nutrition services into HIV and TB care in the two districts. From the time the health facilities started using quality improvement methods to improve nutrition services there has been a great improvement in the number of clients assessed. In January 2013, seven of the eight health facilities were only assessing 106 (2%) of the 5,238 clients visiting the HIV clinics, but by August 2013, they were providing assessments to 6,508 (87%) of the 7,493 clients visiting the HIV clinics. The eighth facility was already providing routine nutrition assessment to all clients; they decided to focus their improvement efforts on improving referral of malnourished clients to the nutrition clinic.

Next steps

Through the quality improvement methods the teams are now able to read through their data and identify other areas for improvement. The teams have currently noted from a review of their data that defaulting from nutrition treatment is a problem for the NCST programme. Teams are next planning to develop aims to reduce defaulting of malnourished clients.