CASE STUDY

Integrating Nutrition Services in HIV and TB Care in Mindolo I Clinic in Kitwe, Zambia

With support from the United States Agency for International Development (USAID) and the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR), health care workers in Kitwe District are improving the quality of nutrition assessment, counseling, and support (NACS). NACS services were not being implemented as part of the daily clinic process, despite health workers being trained in NACS and receiving the necessary tools and job aids. As part of assistance to the Ministry of Health, the USAID Applying Science to Strengthen and Improve Systems (ASSIST) Project trained the health workers in selected site in Kitwe in quality improvement (QI) and provided coaching and mentoring support.

Mindolo I Clinic began improvement activities after other sites and only received a QI orientation rather than the formal QI training. By introducing three simple interventions – 1) introducing a daily HIV/TB attendance book to determine the number of clients seen on a particular day; 2) having volunteers assess nutrition status during registration before the client sees a health worker; and 3) developing new data collection tools to track nutrition assessment and categorization – Mindolo I Clinic increased nutrition assessment and categorization of clients visiting the HIV clinic from 0% to 100% in ten months.

Background

ASSIST is supporting the Ministry of Health in Zambia to deliver high quality NACS services, to get all HIV-infected patients assessed and categorized for malnutrition and referred to services that provide therapeutic or supplementary foods, to ultimately manage and reduce malnutrition among people living with HIV/AIDS (PLHIV). ASSIST’S work in Zambia is being conducted in collaboration with two other USAID centrally funded projects in the country: Livelihoods and Food Security Technical Assistance II Project (LIFT II) and Food and Nutrition Technical Assistance III Project (FANTA III).

ASSIST started this work in 2014 in eight sites in Kitwe District. Mindolo I Clinic is one of the eight Kitwe sites currently integrating nutrition services into existing HIV services. Mindolo I serves a population of 17,227 and offers outpatient, maternal and child health, TB, and HIV services. Mindolo I began improvement activities in March 2015. Before the introduction of NACS, all HIV clients were assessed for their vitals including nutrition status to monitor the patients’ conditions and for drug dosing in the case of children. The patients’ Body Mass Index was calculated electronically when the data entry clerk would update the patient’s record at the end of the day. This meant that almost all patients did not know their nutrition status while at the clinic and that the clinical team missed an opportunity to identify these patients and manage them accordingly. Prior to this work, a baseline was done which revealed that nutrition assessment and categorization was not a part of the clinic activity in the HIV department.

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How improvement activities started at the Mindolo I Clinic

To integrate nutrition assessment and categorization as a routine service to improve the clinic process in Mindolo I Clinic, ASSIST supported the facility to form a multi-disciplinary improvement team which consisted of health workers and volunteers. In February 2015, ASSIST organized a QI orientation meeting with the team during which the QI principles and processes were introduced and discussed. The team identified the following challenges in the provision of NACS services for HIV clients:

- Incomplete or no nutrition information in the patients’ records in the HIV clinic. Nutrition information was not recorded in the patient files, although all the patients had their weight checked and recorded as one of the vital signs for patient monitoring.
- No nutrition data collection tools were available, which meant that there was no nutrition information, and the health care providers were not able to identify and track the progress of malnourished clients.
- Nutrition activities were only limited to children in the under-five clinic.
- Zambia as a nation had no nutrition program for adolescents and adults before the advent of NACS.

First, the team identified the assessment point and chose to focus on the HIV and maternal and child health departments. They made an action plan for the aim of assessing and categorizing 80% of HIV-infected clients for their nutrition status. With support from ASSIST, LIFT II, and FANTA III, the team came up with new data collection tools: the NACS daily attendance book which was used to capture the nutrition assessment and categorization information, the monthly NACS report, and the nutrition interim register. In essence, the daily attendance book would capture all patients with malnutrition and track their progress.

The team initially started assessing and categorizing clients only during patients’ scheduled clinical and pharmacy appointments. They compiled a report at the end of March 2015. However, it was difficult to ascertain the exact number of clients who were seen, especially those who came for drug pick-up. Other care supporters like spouses, brothers, etc. would usually pick up drugs on behalf of the patients. When determining the number of clients who came for drug pick-up, everyone was documented in the pharmacy register as a client, even though they might have not been the actual patient.

In April 2015, the QI team deliberated and proposed the introduction of the daily attendance book as a way to capture the total number of clients seen on a particular day. The QI team wanted an accurate count of clients who visited the clinic in order to calculate the proportion of clients who were assessed and categorized for nutrition status. The attendance book would include columns such as: date, name of client, service (e.g., clinical or

Photo of the Mindolo daily attendance book. Photo by Robert Musopole, URC.
pharmacy) and whether it was the actual patient or a treatment supporter.

Next, in May 2015, the daily attendance book was tested and implemented. Mindolo I health care workers then oriented and assigned volunteers to assist in the assessment and categorization of clients. In September 2015, the team further introduced supervision and checking of data entry completeness in the NACS daily attendance book and register after each clinic day.

Results

As shown in Figure 1, in January 2015, Mindolo I Clinic did not assess any (0%) of the 252 clients visiting the HIV clinics, but by December 2015, they were providing assessments and categorization to 100% of the 762 clients visiting the HIV clinics.

After the QI orientation meeting, the health care workers consistently began assessing and categorizing patients through April. However, the true number of clients seen could not be determined. In April, the QI team came up with the idea of introducing the daily attendance register and tested it to see whether at the end of the day the facility could determine the number of clients seen. When the test proved successful and the facility staff was able to determine the number of clients seen, the tool was implemented. During this same period, volunteers were also involved in the assessment of clients. The number of clients assessed decreased because some of the information was not completed in the NACS daily attendance book. To mitigate this, the QI team decided that the supervisor would review the daily attendance book to check data entry completeness. That is when the number of clients assessed went back up and became sustainable.

Figure 1: Percentage of patients assessed and categorized at Mindolo I Clinic, Kitwe District (Jan – Dec 2015)
Next steps

Mindolo I was the first clinic to introduce the daily attendance book to record all patients who visit the clinic. Through learning sessions and coaching visits, other clinics noticed that Mindolo’s approach seemed to be more effective, so other sites decided to test it. They have now switched to adopt the daily attendance book following the success it showed both in the Mindolo I Clinic and their own clinics. Mindolo I is now expanding their NACS work, having incorporated self-management support counselling to improve engagement, adherence, and retention (EAR) of HIV clients.

The MOH, with support from the USAID ASSIST Project, continues to support Mindolo I and the other seven sites in Kitwe to ensure that they continue to strengthen the integration of nutrition services into HIV and TB care. Since the health facilities started using QI methods to improve nutrition services, there has been a great improvement in the number of clients assessed and categorized for nutritional status.