

Operations Research Brief: Provision of continuing medical education using Woreda-Wide Net videoconferencing

Ethiopia HIV/AIDS Care and Support Project
May 2011

This report was made possible through support provided by the US Agency for International Development, under the terms of Contract No. 663-C-00-07-00408-00. The opinions expressed herein are those of the author(s) and do not necessarily reflect the views of the US Agency for International Development.

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Provision of continuing medical education using Woreda-Wide Net videoconferencing



This brief summarizes the findings of an assessment on the outcome of continuous medical education (CME) provided through videoconferencing that was piloted on eight Woreda-Wide Nets (WWNs) in the Amhara region of Ethiopia from March to July 2010. The assessment highlights the opportunities, challenges, and achievements of this approach in improving the knowledge base of health workers at health centers. Three pre- and post-test sessions were conducted to assess the improvement in knowledge of participants after CME, and a participants' assessment tool was administered to assess the relevance and perceived benefit of CME. The mean difference between pre-and post-test results was computed and the level of significance

between the mean difference was calculated using Wilcoxa sign test. A p value below 0.05 was considered a statistically significant difference.

Background

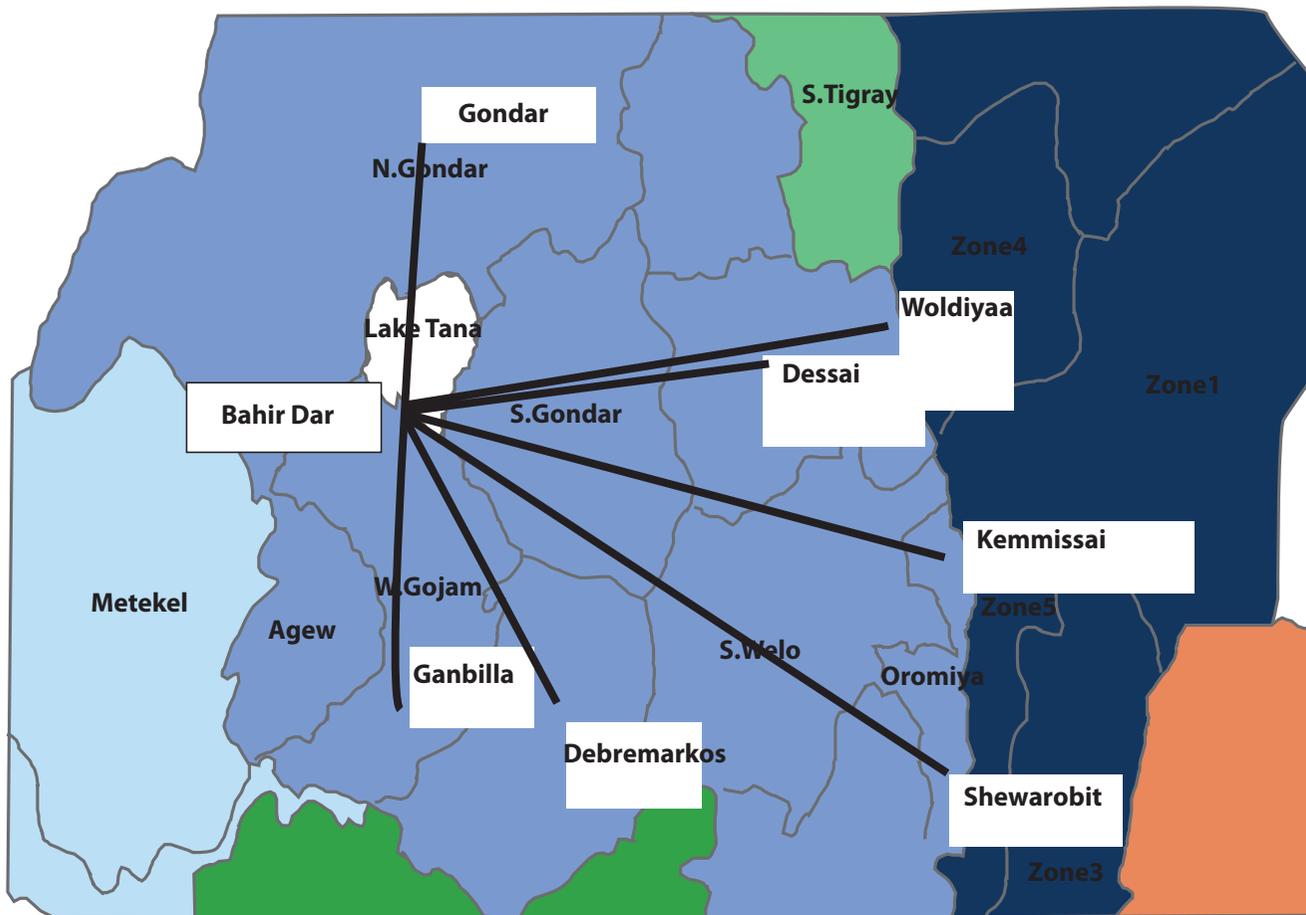
The USAID HIV/AIDS Care and Support Program (HCSP) collaborated with the Amhara Regional Health and Capacity Building Bureau (now known as the Regional Civil Service Bureau), to implement the pilot. The WWN was devised in response to the problem of health workers' limited access to HIV and AIDS information in health centers. An internist with extensive experience in adult HIV clinical antiretroviral

therapy (ART) management was employed as a consultant to conduct CME on adult ART and TB/HIV co-infection. Professionals with relevant experience from HCSP and the African Network for Care of Children Affected by HIV/AIDS (ANECCA) gave CME on HIV-exposed infants (HEI) and pediatric ART. The CME consisted of case summaries prepared from patient encounters and problem-solving approaches to train participants in service. The internist scheduled broadcasts of the interactive, practical lectures.

Initially nine local administrative counsels (woredas) had WWN service. However, recurrent technical failure at Addis Zemen prohibited implementation of CME there, and the site was dropped. Eight centers fully completed the WWN pilot and were the subjects of the operations research.

Key Findings

- A total of 222 participants were enrolled for the CME on ART and management of integrated TB and HIV services, 234 health workers participated in the HEI sessions, and 244 in the pediatric ART sessions.
- Comparison of pre- and post-test results showed that 96 percent of participants in the adult ART and TB/HIV sessions, 87.5 percent in the HEI sessions, and 97.5 percent in the pediatric ART sessions had improved knowledge of the subject areas following the CME. The mean difference between pre- and post-test in percent ranged from 20.5 percent to 29 percent across each session and were highly statistically significant (p values ranged from 0.000 to 0.005).
- Among participants in the adult ART, HEI and pediatric ART sessions, 100%, 99.9% and 97.5% respectively reported that CME is relevant and had helped them provide better quality ART-related care and services.



This synopsis is based on research conducted by HCSP team members Lemma Ketema, Mulu Bitew, Yewulsew Kassei, Kassa Tiruneh, Haile Wubneh, and Daniel Assefa.

This operations research brief was published in May 2011 by the USAID HIV/AIDS Care and Support Program, which is funded by the President's Emergency Plan for AIDS Relief (PEPFAR) and implemented by Management Sciences for Health under USAID contract number 663-C-00-07-00408-00. MSH was the prime contractor, with Dawn of Hope Ethiopia; Ethiopian Inter-Faith Forum for Development, Dialogue and Action; HIV/AIDS Prevention, Care and Support Association; HST Consulting; IMPACT Association for Social Services and Development; IntraHealth International; National Network of Positive Women Ethiopians; Relief Society of Tigray; and Save the Children (USA) as subcontractors.

Figure 1: The Woreda-Wide Net for continuing medical education

- Few participants recorded a negative ranking following the CME sessions: 9/222 (4%), 25/234 (12.4%), and 6/244 (2.5%) for the adult ART and TB/HIV co-infection, HEI, and pediatric ART sessions, respectively.
- Capacity-building of local technicians and institutionalizing the Regional Health Bureaus' use of information technology can result in better utilization of this great opportunity to provide continuing medical information to a large number of health center providers.

Implications

- Videoconferencing promoted an interactive and pictorial presentation of subject matter and an almost real-time experience, which motivated participants and resulted in improved knowledge and understanding of the subject matter.
- The WWN can be used to improve the knowledge base and skill of these health workers and has the potential to positively affect the quality of health care at primary health care facilities throughout Ethiopia.



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