

## **The AFENET Trainees' Immunization Projects**

### **Background**

Despite significant increases in routine immunization coverage since the launch of the Expanded Program on Immunization (EPI) in 1974, unacceptable low coverage rates persist in sub-Saharan Africa, where it is estimated that only about 50% of children are immunized during their first year of life. Additionally, about one-fifth of children who begin the vaccination schedule do not complete it, limiting the effectiveness of doses that they have received and of immunization on a larger population scale.

Clearly, the benefits of immunization do not reach all African children and there is an urgent need to develop new and innovative strategies to fully immunize more children, especially those in hard- to-reach and vulnerable areas. The reasons why almost one-fifth of African children who begin the vaccination schedule do not complete it may differ from place to place, and there are no simple solutions for attaining and sustaining high coverage rates. Consequently, there is a need to utilize local data to identify local problems and develop and implement different strategies for improving routine immunization coverage.

The African Field Epidemiology Network (AFENET) with funding from the United States Agency for International Development (USAID) Bureau for Global Health and in collaboration with the Centers for Disease Control and Prevention (CDC) Office for Global Health, issued a competitive Call for Proposals to support efforts towards developing novel and effective strategies and interventions that would help raise routine immunization coverage in recipient countries. Eligible applicants were current trainees of Field Epidemiology Training Programs (FETPs) in Africa working with an Academic Supervisor. All applicants were required to obtain endorsement for the study from their national EPI managers.

This project is intended to create a unique opportunity for field epidemiologists in training to focus their research projects on improving routine immunization coverage. It requires recipients to share their results with local and national level policy makers and advocate for broader adoption of their proven intervention or strategy through changes in immunization policy and programming.

A Review Committee comprising of members from USAID, CDC and AFENET reviewed the proposals and a total of five applicants were selected and awarded grants to demonstrate the efficiency of a locally innovated strategy in raising and sustaining high coverage rates, and reduced drop out rates in hard to reach areas.

Three trainees are currently implementing the demonstration phase (phase II) of their projects, on average lasting 6 months. Three trainees' exploratory phase (phase I) reports are available on the AFENET website ([www.afenet.net/english/reports.html](http://www.afenet.net/english/reports.html)).

## **Highlights on each of the three projects**

**Trainee: Dr Jared Omolo**

**Program: Kenya Field Epidemiology and Laboratory Training Program**

**Project Title: Improving Immunization Coverage in Siaya District through Customer Care Training for Healthcare Workers**

**Phase I of Jared's project conducted in the Western Kenya district of Siaya sought to identify reasons for the low vaccination coverage, and used the findings to design an appropriate intervention. The key findings from phase I were: healthcare workers at immunization posts were unfriendly, and even hostile to mothers; and unfriendly opening hours for provision of immunization services.**

**Jared's intervention has focused on changing healthcare worker attitudes and practices in a selected sub-district of Siaya (Wagai division). Healthcare workers were trained about how to provide services to mothers in a friendly manner including: talking to them nicely, ensuring that mothers do not wait for long hours before they are attended to, and providing information. During the training, video clips of interviews Jared held with mothers expressing their perceptions of the services were shared with the healthcare workers.**

**Jared organizes bi-monthly meetings for the healthcare workers at each immunization post. During these meetings (over a cup of tea provided by the project), the healthcare workers discuss challenges faced during service provision, and how they can overcome them. Jared and his team, remind the staff about the importance of customer care during these meetings.**

**Jared has trained and is using primary school teachers and children to reach out to the community around each immunization post to inform them about the project, and how it has helped change the attitudes and practices of the healthcare workers. The information is relayed at market centers, to neighbors, friends and relatives where they live. The project has provided some text books to each of the schools that are participating in the project.**

**To measure success, Jared undertook a baseline study to collect data on key immunization indicators; a post intervention survey will be conducted later in October to collect data on the same indices. Over the last 4 months of the intervention, the immunization posts have recorded sharp increases in attendances. Majority of mothers at the posts report that the health care workers are friendlier and more caring than they used to be.**

**Trainee: Addmore Chadambuka**

**Program: Zimbabwe Field Epidemiology Training Program**

**Project Title: The Effectiveness of lobbying local health authorities to prioritize Immunization Services in Gokwe South District, Zimbabwe**

**Phase 1 of Addmore's project established that low immunization coverage was attributed to low staffing levels at health facilities as a result of high attrition, large populations that are hard to reach, and the absence of regular outreach service for such communities.**

**Addmore designed a strategy that uses locally made motorbikes, bicycles and scotch-carts for outreach services. Ten motor bikes were already available in the district and these only required fueling and routine service. Bicycles or scotch-carts were used at facilities where the bikes are not available and in cases where bikes develop problems.**

**Addmore lobbied the local health authorities to prioritize immunization services and provide fuel for outreach services. Access to fuel in Zimbabwe's economic crisis is no simple task. After protracted discusses, the authorities were convinced about the viability of Addmore's plan and agreed to ensure that there would be fuel every week for the bikes.**

**This strategy has enabled the EPI team to extend immunization services beyond fixed health centers to reach the un-reached children and women in child bearing age without depending on the outreach from the district. Where appropriate, the strategy brings to the hard-to-reach populations multiple interventions in addition to immunization: Chloroquine, SP, impregnated bed nets, vitamin A and condoms.**

**If shown to make a difference, this strategy could become a model that can be cascaded to other areas as it has the potential of being effective in resource constrained situations as we currently are experiencing.**

**Supportive visits have been done to the district and the facilities to assess progress. It is during these visits that gas for cold chain maintenance to the facilities is supplied.**

**The final evaluation of this strategy will be done after 6 months from the start of the intervention and compare results with the findings from the situation analysis. So far health workers report an increase in the number of children being immunized in the outreaches due to introduction of motorbikes, bicycles and scotch-carts. It is evident from routine data in Gokwe that drop out rates are declining.**

**Trainee: Dr Nicholas Ayebazibwe**

**Program: Uganda Field Epidemiology Training Program**

**Project Title: Using the Tickler System to Improve Immunization Coverage in Rakai**

**During Phase I it was established that poor community mobilization and low community awareness were major contributing factors to the low immunization coverage rates. Nicholas designed a tickler (reminder/recall system) with a health education component to address the poor community awareness on immunization. Mobilizers were provided with basic information on immunization and asked to use opportunities in communities like social functions to educate their communities in addition to the defaulter tracking and mobilization of mothers for routine and outreaches services.**

**Support supervision visits are done twice a month in each health facility in the sub-counties under study. So far there is a tremendous increase in number of children turning up for immunization at both the static and outreach centers as evidenced by the records at these centers.**

**A baseline study was conducted at the beginning of the intervention phase that involved reviewing records to find the exact coverage rate for all the antigens and the drop out rates at the time. At the end of 6 months of the intervention an evaluation will be done using the same methods to assess the impact of the intervention.**

**NB: It is expected that the trainees will present their Phase I and Phase II findings at the TEPHINET-AFENET regional scientific conference in December 2007.**