Introduction

The Pfizer Global Health Fellows Program is an international corporate volunteer program. Through the GHF program, Pfizer colleagues are paired with leading international development organizations in short-term assignments in key emerging markets designed to transfer their professional expertise in ways that promote access, quality and efficiency of health services for people in greatest need.

This annual essay collection illustrates how Pfizer’s Global Health Fellows are working together with partner organizations in underserved communities to solve global health challenges.

To learn more about the Pfizer Global Health Fellows Program please visit www.pfizer.com/ghf.

After five years of in-depth experience within Pfizer’s market analytics and worldwide policy divisions as a statistician and policy analyst, I shared my expertise for three months with IntraHealth International as a Pfizer Prevention Fellow, based in Addis Ababa, Ethiopia. IntraHealth International has spent years researching ways to improve the health of women and children through the most cost-effective means possible. In doing so, they have developed some simple but novel programs aimed at the most vulnerable populations. Most of my duties focused on evaluating women and children’s health programs specifically aimed at preventing mother-to-child transmission of HIV.

Looking back now, my experience in Ethiopia was more stimulating than I could have ever imagined. During my first weeks, I was struck by the sheer enormity of the challenges facing the Ethiopian people and government. Despite an improving and rapidly growing economy, poverty, disease, poor infrastructure and inadequate educational opportunities have created an ongoing public health crisis. The toxic combination of these factors has resulted in an average life expectancy of only 56 years according to the World Health Organization (WHO) [1].

It would be naïve to suggest that I was completely able to digest all of the complex problems surrounding me. However, in my three-month fellowship, my entire perspective on health care delivery has changed forever. I have gained an enormous appreciation for the amount of logistical effort needed to make sweeping changes to strained health care systems.

Nevertheless, there are many interventions that are extremely effective and inexpensive to implement. These are the “low-hanging fruit” of public health programs. By luck, I spent the majority of my time working on interventions that fell into this category.

Recently, several programs have focused on poor HIV-positive pregnant women who represent one of the most desperate demographics in Africa. Without proper prophylaxis treatment, mothers run a high risk of transmitting the virus to their newborns. Finding and treating these women remains an extremely difficult task. The Ethiopian government and NGOs have relied on broader efforts to encourage all expectant mothers to seek antenatal care during their pregnancy. HIV testing is a routine part of this care and can identify positive patients early.

However, there are many complex cultural barriers that have hindered these broader efforts. First, according to the United Nations Children’s Fund (UNICEF), Ethiopia has one of the lowest rates of institutional delivery in the world with only 5% of pregnant mothers delivering at qualified health centers [1]. Thus, the majority of mothers do not seek antenatal care and thereby are unaware of their HIV status. Through the massive efforts of NGOs and other aid organizations, demand for antenatal care is slowly increasing and with it the percent of health center-based deliveries. These efforts have involved addressing more practical matters such as providing transportation to and from antenatal care visits.
Nonetheless, over time, research has shown that simply identifying HIV-positive mothers and giving them antiretroviral prophylaxis drugs is not fully effective in preventing transmission of the virus [2]. This straightforward idea of simply testing, identifying and treating ignores an entire host of deeper cultural and social considerations.

For starters, many HIV-positive women have been abandoned by their extended families once their status becomes known. In some cases, their male partners even leave them without any means of support or income. Others avoid telling their families altogether out of fear. Ultimately, these women become enclosed in an environment of fear, isolation and uncertainty. Many women simply become overwhelmed by their desperate circumstance and fail to follow up with their prescribed therapy. Additionally, most of the mothers have little or no formal education and thus do not understand the vital importance of the treatments.

To address this isolation and the accompanying psychosocial stress, IntraHealth International created “Mother Support Groups” (MSGs) in Ethiopia to provide counseling and support services for HIV-positive mothers. The initiative was modeled after the mothers2mothers program started in South Africa. The groups provide a safe-haven environment for both pregnant women and new mothers to meet and receive important health information, antiretroviral treatment (ART), and instructions on receiving follow-up care for their children. Most importantly, the groups provide psychological support and social bonding, which seem to be key in reducing stigma, bolstering confidence and inspiring hope. The meetings usually end with a traditional Ethiopia coffee ceremony that facilitates conversations and ultimately new relationships.

IntraHealth International has subsequently conducted research showing that mothers in MSGs are significantly more likely to follow up with their ART thereby reducing the number of HIV-positive newborns. In a recent evaluation of 20 health centers with support groups, nearly three-quarters of participating mothers had antiretroviral uptake versus only a quarter of the nonparticipants. For the mothers, the groups become almost like extended families. Friendships are formed and the isolation once surrounding them begins to dissipate. The mothers view the groups not only as a source of information but also of hope. Ultimately, the program provides a valuable source of self-confidence as mothers begin to take an active role in protecting their children.

During my fellowship, I had a chance to visit one of the groups at a health center on the outskirts of Addis Ababa. The experience was extremely touching. It became obvious that this simple and cheap intervention was incredibly effective. All of the mothers were HIV-positive but every newborn in the group was HIV-negative. This is overwhelmingly the case in most of the groups throughout the country. Each baby represented decades of saved life-years. Unfortunately, in many areas of Ethiopia, an HIV-positive newborn has a life expectancy of about 5 years due to the lack of basic health care and their inability to fight off common infections.

As part of my fellowship, I conducted a cost-effectiveness analysis providing statistical evidence to show the program’s ability to prevent newborn infections. Looking at 63 MSG sites that operated from October 2007 through September 2009, we confidently concluded that the program had prevented approximately 56 HIV infections at a cost of US$183 per life-year saved. In Ethiopia, the cost-effectiveness threshold for interventions at that time equaled US$1,032 per life-year saved; interventions exceeding this threshold were not considered cost-effective or worthwhile. This was welcome news and confirmed the anecdotal evidence that the program is preventing mother-to-child transmission of HIV.

Going forward, the challenge will be ensuring sustainability in the face of limited funding and continued administrative changes. The cost-effectiveness analysis will help ensure the program continues as government and health officials realize the value of the program. The analysis only covered a portion of the active MSGs over a limited time. To date, the MSGs have been significantly expanded throughout five regions of the country.
Key Learnings
This project adds to a growing collection of evidence suggesting that coordinated, holistic care is the best method for treating serious chronic conditions. Blindly making medications available does not necessarily ensure they will be used properly. Simply stated, a patient’s overall environment must be conducive to care. The evidence around the Mother Support Group program demonstrates this important point. Unfortunately, health care systems around the world have fallen behind in integrating psychosocial support with clinical care. IntraHealth International’s successful effort can serve as a model for all providers in both developed and under-developed countries.

In regards to Ethiopia, a burgeoning middle class will create a potentially larger market for brand name medicines. However, demand will be dependent on patients and providers not only understanding the value of medicines but also the nature of their conditions and environment. Such an understanding will require a joint effort by all stakeholders in order to improve the country’s public health situation. The Mother Support Group program is one locally developed tool that can help in this broader effort.

References