Published in final edited form as:

AIDS. 2010 January ; 24(Suppl 1): S73–S78. doi:10.1097/01.aids.0000366085.14064.6f.

South-South collaboration in scale up of HIV care: building human capacity for care

Louise C Ivers^{1,2,3,4}, Joia S Mukherjee^{1,2,3,4}, Fernet R Leandre⁵, Jonas Rigodon^{5,6}, Kimberly A Cullen¹, and Jennifer Furin^{1,3}

¹ Brigham and Women's Hospital, Boston, MA

² Harvard Medical School, Boston, MA

³ Partners In Health, Boston, MA

⁴ Harvard Medical School Center for AIDS Research, Boston, MA

⁵ Zanmi Lasante, Cange, Haiti

⁶ Bo-Mphato Litsebeletsong tsa Bophelo, Lesotho

Abstract

Objective—South-South collaborations in building human resource capacity have been inadequately emphasized globally despite the growing experience among resource poor countries in scaling up HIV care and the funding to implement programs. This paper aims to describe one such successful collaboration, where a model of HIV care was developed in Haiti, adapted and expanded to Lesotho and allowed the effective scale up of HIV and other treatment services in a rural African setting.

Methods—Institutional experiences and lessons learned over a ten year period in Haiti and three year period in Lesotho are discussed.

Results—The Haiti-Lesotho collaborative model shows that human resource capacity can be built using creative partnerships and exchanges between developing countries, particularly with financial support from the North. The collaboration allows for the sharing of experiences and solutions through perspectives and experiences that are unique to developing countries. Healthcare workers in Haiti and Lesotho have established meaningful and fruitful cross-country working relationships, job satisfaction and retention has been improved and a sense of solidarity developed. The model of care developed in Haiti was successfully adapted, replicated and implemented in Lesotho.

Conclusion—South-South collaborations are an important way for countries with established experience managing HIV in resource-poor settings to share their skills in a collaborative fashion with other nations facing similar disease problems and infrastructural challenges. This model for scaling up effective practice should be encouraged and supported by program funders.

Keywords

Haiti; Lesotho; HIV; human resources; South-South

Introduction

Of the 33 million persons estimated to be living with HIV, approximately 22.5 million live in sub-Saharan Africa [1]. In addition to bearing the brunt of the global pandemic, countries in sub-Saharan Africa suffer from an additional wide range of additive problems, including poverty, lack of infrastructure, and a lack of human and financial resources to treat HIV and other pandemic diseases[2]. Although there have been many advances in making HIV preventative and treatment services available to the poor living in Africa and other parts of the world much remains to be done in order to truly stem the pandemic which, in some places, is threatening entire populations and nations [3].

One area of particular concern is the lack of adequate numbers of trained healthcare workers (HCW) to care for people living with HIV and other diseases. This is the case in many poor countries particularly in Africa but also in some middle income and even in resource rich countries. In 2006, the World Health Organization (WHO) estimated that 57 countries were facing critical shortages of HCW [4,5]. An estimated four million additional workers are required globally to manage the HIV epidemic [6]. In some areas most heavily hit by the disease, there is only one physician for every 20,000 people. Because in countries like Botswana and Lesotho there are no medical schools, local nationals must leave their country of birth to receive medical training. Many never return due to so-called 'push factors' including poor working conditions, poor pay, as well as lack of access to medications and materials to perform their jobs. Additional factors 'pull' workers to more attractive jobs in cities or in resource-rich settings [7]. In Lesotho, as many as 54% of nursing posts are vacant in some areas [8].

The brain drain results in an enormous gap between the need for health care and the staff who can provide it. Many times this gap is never filled, particularly in rural areas. In some countries, such as in South Africa, Lesotho and Botswana, foreign health professionals constitute a large proportion of the work force [9–12]. The cadre of foreign health professionals working in African countries includes both professionals from one African country working in another African country and expatriate health professionals from the world's wealthy countries. Foreign professionals may be critically important when there are few local health workers to recruit or when they have a skill set that is otherwise lacking, but there are drawbacks to their use [13]. In addition to language and cultural barriers, often these doctors have trained in high technology settings and are unable to understand or manage the problems faced in resource-limited settings, at least not without significant investments in training. Moreover, the cost of international experts and consultants often is many times more than the local staff is paid creating poor staff cohesion and siphoning resources from patient care. Lastly, few health professionals, particularly from developed countries, have the experience of living and working in a rural area and often find it difficult and isolating.

Partners In Health, a non-governmental organization based in Boston, developed a model to build human capacity around HIV and primary healthcare services in Haiti and Africa.. What is unique about the model is that i) it has been developed in Haiti over the last ten years and it is the health providers from Haiti who have replicated the model in sub-Saharan Africa; ii) it emphasizes community-based support to people living with HIV and other diseases, putting resources into recruiting and training paid community health workers in each country; and iii) human capacity development and scale up of services has been done in collaboration with the ministry of health of each country. The South-South collaboration which is taking place between Haiti and Lesotho will be described in this paper as a model for how countries with established experience managing HIV in resource-poor settings can

share their skills in a collaborative fashion with other nations facing similar disease problems and field conditions.

Existing discussion on collaborations with the South

South-South, or what is also known as “horizontal” collaboration has been described for management of a number of public health problems, particularly for reproductive health and family planning [14]. Partners in Population and Development (PPD) is an intergovernmental organization launched in 1994, dedicated to the promotion of South-South partnerships and has published reports on successes and challenges to such collaborations between member countries in the implementation of family planning strategies and training programs [14–18]. These collaborations can be very fruitful, for example, successful increase in the uptake of family planning was noted in the case of Tunisia’s collaboration with Niger. Chandiwana et al describe a successful program of, first, North-South collaboration which then became a South-South research collaboration [19].

Some attention has recently been given to the issue of South-South research collaborations and their various merits and challenges [20,21]. However, the extent to which South-South collaborations are occurring in service delivery, particularly outside the realm of family planning is relatively low. Poor countries are often too busy dealing with their own overwhelming health problems to be able to spare staff to assist in taking on those of other countries. North-South collaborations feature highly in the published literature, but a recent analysis revealed few multi-country collaborations at least in regard to health systems strengthening that involved countries in the South working together [22]. This is unfortunate given that the experiences of many practitioners in poor countries are uniquely suited to assist scale-up efforts in other poor countries. Our experience suggests that South-South collaboration can be a highly effective model for transmitting successful practices throughout the world. This paper will discuss these issues in detail based on institutional experience and lessons learned over a period of ten years in Haiti and three years in Lesotho.

Settings and Programs

Haiti

Haiti is the poorest country in the Western Hemisphere and is burdened with the region’s worst health statistics and highest prevalence of HIV infection, estimated at 3.8% [1]. The population of eight million people lives largely in the rural parts of the country, where infrastructure is poor, roads are frequently either non-existent or inaccessible, electricity is largely unavailable and only in 2007 was communication via cell-phone widely available. In the rural central region of the country, over twenty years ago, a non-profit organization called Partners In Health, was created in addition to its Haitian counterpart (Zanmi Lasante) to address the healthcare needs of a group of squatters who had been displaced from their lands by the construction of a hydroelectric dam [25]. In the late 1990’s the HIV Equity Initiative was founded to provide HIV testing and treatment in the context of primary healthcare – based on the notion of health as human right rather than on ability to pay. The program has since expanded from a small charity clinic to become a nine center collaborative effort with the Haitian Ministry of Health, serving a catchment area totaling 1.2 million people, caring for over 12,000 people living with HIV. The program has been described in detail elsewhere [26,27].

Haiti faces human resources challenges in healthcare that are similar to many sub-Saharan African countries. In 2005, only 730 doctors and 1013 nurses were reported to be working in the public sector [28]. Most of these work in the cities rather than in the rural provinces. Despite this, Partners In Health has been successfully able to staff nine clinics in the Central

and Artibonite departments of Haiti with recruitment and retention measures that include fair (but not excessive) salaries for doctors and nurses including living accommodations, transportation and meals provided for those staff who are from outside the area of the clinics. Furthermore, the largest cadre of healthcare workers in the program is community health workers (named *accompagnateurs*) who are paid to provide daily support to patients living with HIV, TB and other chronic diseases and who act as links from the community to the health center. The HIV Equity Initiative now cares for over 12,000 people living with HIV and in 2007, had 1.3 million patient visits.

As a result of the expansion and success of the HIV Equity Initiative, doctors, nurses and community health workers in the Haiti program developed a unique expertise in the scale up of HIV care in rural resource poor areas both in terms of logistics and clinical services. Although a handful of expatriate clinicians have been involved in this expansion, some 2,500 Haitian HCW are currently behind the day to day management and executive direction of the program. This local expertise was capitalized upon in the expansion of Partners In Health programs to sub-Saharan Africa.

Lesotho

Lesotho—a country home to more than 2 million people and facing the third highest seroprevalence of HIV in the world—is illustrative of the human resources crisis facing many African countries [29]. There are an estimated 80 physicians in the country, most of whom work in the capital city, and an estimated 40–60% of nursing positions are unstaffed. The country does not have a medical school and of physicians working in Lesotho, fewer than half are from the country itself [30]. The mountain regions of Lesotho—which comprise 80% of the land mass and are home to more than 25% of the population—have been devastated by the HIV pandemic, with some regions reporting a seroprevalence as high as 40–50% [31]. Yet there is little in the way of health care services offered in these regions, let alone diagnosis and treatment of HIV.

To address this issue, Partners In Health, began working with the Ministry of Health and Social Welfare of Lesotho, the Lesotho Flying Doctors Service, Mission Aviation Fellowship, and the Clinton HIV/AIDS Initiative to build a program for improved testing and treatment for HIV in the mountain regions. This project is known as the Rural Initiative. The regions served by the Rural Initiative are very remote, accessible only by single-engine Cessna plane and lacking phone service, electricity and running water. In April and May, 2006, Partners In Health, Mission Aviation Fellowship and the Clinton HIV/AIDS Initiative surveyed all ten of the Lesotho Flying Doctor Service clinics to assess their readiness to begin HIV treatment. In June of 2006 training of 75 village health workers and clinic staff regarding HIV testing and treatment commenced in one site with the highest disease burden and largest patient population. An initial cohort of patients began antiretroviral therapy (ART) in July, 2006 with a plan for expansion to a total of ten by the end of 2008. In 2007 alone, a total of 54,000 patient visits were logged in these clinics. More than 8,000 individuals have been tested for HIV and more 2,600 patients have been enrolled in HIV care. A total of 1,233 patients are receiving ART and 547 antituberculous therapy. Prior to the start of the Rural Initiative, the clinics were staffed by one nurse or one nursing assistant and were visited by a physician once a month. Currently, each clinic now has a full-time physician and 3 additional nurses. 27 health paraprofessionals have also been recruited and trained to work in the clinics. Home visits are made to surrounding villages to see bed-bound patients. Finally, the program relies on an extensive network of more than six hundred paid village health workers to observe ART treatment, to communicate with clinic staff about sick patients in the community and to provide education and training to the community about HIV.

Lessons Learned

The HIV Equity Initiative developed in Haiti was used to model the Rural Initiative treatment program in Lesotho and serves as an example of how South-South collaboration can be mutually beneficial. This was done in several ways, which are described in detail below.

1) Haitian physicians and nurses were among the first care providers in rural Lesotho and remain as key members of the health service networks in Lesotho

The first clinic that opened in Lesotho was staffed by a physician from Haiti. He had received his training in Haiti and worked under the HIV Equity Initiative at two clinics in the Central Plateau. In August, 2006, he relocated to Lesotho and became the first permanent staff physician providing care in the mountain clinics of Lesotho. Along with his medical skills, he brought with him the programmatic training he had received in Haiti. He was able to quickly put what he had learned in to practice and now manages the busiest site in Lesotho's Rural Initiative. Other providers from Haiti have also spent time on the project providing direct care and training in Lesotho's mountains.

Language has not been a significant barrier in this model. Some of the first staff hired for the project in the mountains were English-Sesotho translators, many of them people living with HIV and the Haitian physician soon became proficient in Sesotho. In other South-South exchanges between Haiti and Partners In Health projects in Africa, Haiti's francophone culture has been a particular benefit in communication.

2) The primary care model of service within which HIV prevention and treatment is centered was developed in Haiti and replicated in Lesotho, including the provision of nutrition, housing and educational support

The model developed in Haiti has at its center the provision of a wide range of medical and social services as part of HIV prevention and treatment. These include the provision of primary health care, the provision of women's and children's health care, management of tuberculosis, identification and treatment of sexually transmitted infections, and the provision of quality social services—including food, jobs and housing assistance—to persons enrolled in the program. A very similar model was put into place in Lesotho. Working with the Ministry of Health, public clinics were reinvigorated and provided with necessary infrastructure development, rather than building new or parallel health systems. Physicians and nurses now staff these clinics and provide care to all patients. HIV testing and treatment, as well as management of TB and sexually transmitted diseases is provided in a comprehensive fashion in the context of primary healthcare and women's health services.

3) The model using paid community health workers as the backbone of the project in Lesotho came directly from work done in Haiti as part of the HIV Equity Initiative

In Haiti, there are more than 2000 community health workers, known as *accompagnateurs*, who provide daily services to patients in their homes. Although the use of community health workers is certainly not new or unique to Haiti, the consistent reliance on paid community health workers to provide daily support to persons living with HIV and other chronic illness is one of the strongest achievements of Haiti's HIV Equity Initiative. This is one of the most important human resource strategies replicated in Lesotho as part of the South-South collaboration described here. In Lesotho, more than 600 community health workers have been trained – the initial cadre, by the Haitian physician - and receive monthly continuing education sessions. They receive a monthly salary as well as a transportation stipend. These community health workers are of great importance in the geographically isolated mountains of Lesotho as they have been in rural Haiti, where a village may be five to six hours walk

from the clinic, a near impossibility for those who are ill. Community health workers not only assist patients with their medications, but they also identify side effects, social problems, and can come to the clinic if a patient is too ill to make the trip him or herself. Furthermore, they are advocates for those in their villages, organize home visits by the medical teams and serve as a resource to all those living in the area. Although other CHW programs exist in resource-poor countries, in this instance more than 20 years of experience in providing care using the model in Haiti allowed “lessons learned” to be applied directly to the new program in Lesotho.

4) Training manuals and materials developed in Haiti were adapted culturally and linguistically and are being used in the scale-up throughout Lesotho

As part of the HIV Equity Initiative, the teams working in Haiti developed several training manuals and modules. These materials are specifically designed to address issues and challenges faced in resource-poor settings based on learned experience, and take into account concrete situations and challenges faced by many providers in poor countries. They are widely used throughout Lesotho today, having been adapted to the local language and to take into account cultural variation.

5) The models developed have allowed for enough flexibility—while adhering to certain key principles—to allow for innovation and adaptation to unique cultural and geographic circumstances

Haiti and Lesotho are very different countries, each facing unique challenges. As the poorest country in the Western Hemisphere, and with the highest HIV seroprevalence in the region, Haiti has an HIV prevalence of approximately 2.2%. Lesotho, on the other hand, has a higher Gross National Product, but has one of the highest rates of HIV in the world at an estimated 23–30% [32]. Haiti shares a landmass with the Dominican Republic and has a population of about 8.4 million. Lesotho is completely surrounded by the Republic of South Africa and has a population of about 2 million. Cultural and technological differences between partners can lead to a lack of pertinence, particularly in North-South clinical or research collaborations [33,34]. Despite their differences, however, both Haiti and Lesotho face immense logistical challenges to providing healthcare, including poverty and rural isolation. Most aspects of the HIV Equity Initiative are well-placed to function in Lesotho and the Haiti model has offered enough flexibility to be extremely useful in the Lesotho context.

6) Further exchanges between providers in Haiti and Lesotho have occurred at a variety of international conferences and locally sponsored events

In addition to the significant periods of time spent by Haitian HCWs in Lesotho working on the Rural Initiative, several health providers from Lesotho have visited Haiti to see the model in action there. Providers from both sites have met at international conferences in Boston, Kigali and Cape Town. These meetings allow for the exchange of ideas, reports on progress, and discussion of how to approach common challenges. They also provide a forum for team-building and sharing of a sense of solidarity between workers from countries that are geographically very far, yet who share common challenges. Consistent with other reports on networking among South-South collaborators [14,18,35], providers from the Haiti-Lesotho collaboration have stated that these interactions with their peers working in similar circumstances have been among the richest part of their experience working in Haiti and Lesotho.

7) Opportunity to participate in South-South exchanges has become an incentive for experienced healthcare workers in Haiti and an important part of a comprehensive package for staff retention

Much has been made of the “brain drain” in which talented health professionals from poor countries are recruited to work in the wealthy countries of the world. We have found that when unique opportunities—such as the collaboration described in this paper—are offered to professionals from countries such as Haiti and Lesotho, they find sharing their time and experience with others in similar settings to be as appealing as leaving to go and work in a wealthier country. Although not initially designed with this in mind, participation in short-term transnational activities became an incentive for experienced staff members from Haiti, and has now become an important part of the career development path in that program. Offering the opportunity of international experience has been an important piece of the Haiti-Lesotho South-South collaboration and represents a novel way to retain staff in the resource-poor world.

8) Resources and technical expertise from resource-rich countries facilitate the South-South collaboration

The collaboration described in this paper is driven by the teams from Haiti and Lesotho. They are, however, provided with support from staff at Partners In Health, based in Boston, USA. This support comes in the form of financial resources, technical support, as well as pragmatic solidarity - found in serving the rural poor alongside Haitian and Basotho colleagues. The provision of such support has been vital in building a strong collaborative effort between the teams in Haiti and Lesotho. By fostering these interactions Partners In Health is contributing to a model of care that is beneficial to both country programs, can be replicated at other sites and can be sustained over time.

Financing of Partners In Health activities comes from a variety of sources including the US Presidents Emergency Fund for AIDS Relief and the Global Fund for AIDS, TB and Malaria in Haiti; the Clinton HIV/AIDS Initiative and Irish Aid in Lesotho as well as multiple private donors. Although none of these funds are donated with the specific goal of supporting South-South collaborations, Partners In Health has directed the use of its human resources and training budget this way. In general, technical assistance spending by donors on consultants, training and research accounts for approximately 20 billion US dollars per year and in one international study was criticized as being “expensive, ineffective and pushing a ‘west knows best’ agenda” [36]. Unlike models of assistance that pay high salaries to non-national consultants, salaries for doctors, nurses and community health workers across Partners In Health sites are equitable and collaborative exchange visitors are not paid special consulting fees for their work overseas.

Conclusions

The Haiti-Lesotho collaborative model described in this paper is just one example of how human resource capacity can be built using creative partnerships and exchanges. Although both Haiti and Lesotho face overwhelming disease problems and logistical constraints, it is by sharing their successes in overcoming these that has allowed for meaningful and fruitful collaborations to occur. This example can serve as a model for other groups with a wealth of relevant field experience in resource-poor settings to reach out to their fellow providers and form lasting, mutually beneficial collaborations that will provide high quality care to all those in need of service. Institutions in resource-rich countries should support and facilitate these South-South collaborations as complementary and at times superior to existing North-South collaborations.

Acknowledgments

All authors contributed to the data analysis and writing of the manuscript.

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