

**Partners In Health  
Recent Research Findings  
June 2012**

**Community Health Workers drive successful HIV outcomes in Rwanda:** A PIH/IMB study demonstrated that adding community health workers to the national HIV treatment program achieved high retention (92.3% of patients) and low loss to follow-up (2.7% of patients), meaning that an extremely high percentage of patients remained in care two years after enrolling on treatment at a PIH/IMB facility.<sup>1</sup> The study also found positive health outcomes for these patients, with a low mortality rate (5.0% of patients) and high rate of viral suppression (97.5%) after two years. These outcomes are among the best ever reported worldwide—including in the US—and compare favorably to other parts of sub-Saharan Africa, where only 70% of patients on HIV treatment are retained in care after two years. Retaining patients in care is essential to their survival and lowers the chances of HIV transmission. The Rwandan national HIV program, thanks to the government's substantial investment in health, has demonstrated a high retention of HIV patients (86%), but this study shows that PIH/IMB's addition of community-based support helps achieve even better outcomes.<sup>2</sup>

**MDR-TB treatment outcomes in Lesotho:** A PIH-Lesotho study has shown that children who have MDR-TB can be successfully treated, even in a setting where a large number of these patients are also HIV-positive.<sup>3</sup> This study is one of the first of its kind that reports outcomes of pediatric MDR-TB patients in a high-HIV prevalence population. The study focused on a cohort of 19 children, 75% of whom were HIV-positive and over half of whom were malnourished. These comorbidities make treatment complicated, particularly for pediatric cases of MDR-TB. Each patient was assigned to a community health worker for accompaniment, and PIHL provided social and nutritional support as needed. At the end of the study, 88% of the patients successfully completed treatment. This is similar to outcomes among children in MDR-TB treatment programs with primarily HIV-negative patients, where treatment success ranged from 80-100%. Through this study, PIHL demonstrates that programs can achieve excellent treatment outcomes among coinfecting pediatric patients and therefore should not deny care to those children who have a dual diagnosis of HIV and TB.

**Saving women's lives in Lesotho:** PIHL launched the Maternal Mortality Reduction Program in 2009 to address the staggering amount of maternal deaths in rural Lesotho, where one in every 31 women will die in childbirth at some point during her life. Trained, supervised, and stipended maternal health workers engage with pregnant women in the community in order to drive demand for antenatal care, HIV and STI testing, and facility-based delivery. The program has achieved remarkable results in its first two years. The pilot health center reported an increase in prenatal visits of more than 50% and facility-based deliveries more than tripled since the program began. The program was scaled to eight facilities in 2011 and thus far there have been zero maternal deaths among women enrolled in the program.

**Outreach effectiveness for cholera prevention and treatment in Haiti:** Nationwide in Haiti, the case fatality for cholera is 1.3%; at PIH/ZL facilities it is 0.3%. This positive outcome has been achieved amidst an overwhelming volume of patients at our cholera treatment facilities: PIH/ZL has treated over 13% of the total cholera cases in Haiti. In order to reach patients in remote areas with prompt treatment and prevention education, PIH/ZL trained over 1,800 community health workers to provide cholera services in six months. This enabled PIH/ZL to

---

<sup>1</sup> Rich ML et al. Excellent clinical outcomes and high retention in care among adults in a community-based HIV treatment program in rural Rwanda. *J Acquir Immune Defic Syndr*. 2012 Mar 1;59(3):e35-42.

<sup>2</sup> Lowrance DW et al. Adult clinical and immunologic outcomes of the national antiretroviral treatment program in Rwanda during 2004-2005. *J Acquir Immune Defic Syndr*. 2009 Sept 1;52(1):49.

<sup>3</sup> Satti et al. Outcomes of Comprehensive Care for Children Empirically Treated for Multidrug-Resistant Tuberculosis in a Setting of High HIV Prevalence. *Plos One*. 2012 May; 7(5):e37114.

**Partners In Health  
Recent Research Findings  
June 2012**

reach over 500,000 individuals—over a third of total our catchment area—with water purification supplies and cholera prevention education during 2011. PIH/ZL began administering the two-dose oral cholera vaccine (OCV) to a target community in Haiti in 2012. Thus far the vaccine campaign has reached over 40,000 people, and the number of people who have received both doses of OCV is very high.

**Demonstrating the Benefit and Cost-effectiveness of C-sections:** A recent study analyzed the costs and benefits of providing Cesarean sections to women who experience obstructed labor.<sup>4</sup> C-sections are a key intervention to save women's lives but because they require a significant investment in surgical infrastructure, they are often deemed too costly of an intervention in poor countries. The study examined 49 countries where the number of C-section deliveries was insufficient to meet patients' needs. C-sections were found to be a cost-effective intervention in 48 of the 49 countries. The cost-benefit analysis took into account the economic value of a life lost during pregnancy and found that in these countries every \$1 spent on providing C-sections earns \$6 of economic value over the woman's lifetime. This study was published by Dr. Paul Farmer, PIH co-founder, and Dr. John Meara, a long-time collaborator from Harvard Medical School, to show that providing life-saving C-sections for the poor is not only a moral imperative but a cost-effective one as well.

---

<sup>4</sup> <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0034595>