

1996 - 2012



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# Summary

Between 1996 and 2012, Grounds for Health partnered with coffee farming communities in Oaxaca, Veracruz, and Chiapas, Mexico to improve cervical cancer prevention services in rural, low-resource settings.

### Oaxaca (1996-2005)

- Established community based model for improving cervical cancer prevention services
- Developed and implemented culturally appropriate community education plan
- Trained local providers on Pap sampling, colposcopy and LEEP
- Established a dysplasia clinic to treat pre-cancers in Pochutla, Oaxaca

#### Impact

- Improved quality of cervical cancer prevention services, reduced barriers and increased demand for screening in the community
- Influenced local health authorities' decision to provide services to low-income patients on a sliding scale
- Drew attention of state and national health authorities, leading to further investments in cervical cancer control in the four Mexican states with the highest burden of disease

### Veracruz (2000-2008)

- Expanded clinical training for local providers and developed formal training curriculum
- Influenced co-ops to establish network of community health promoters and conducted CHP trainings
- Provided technical assistance to co-ops and local health authorities to improve quality and access to cervical cancer services in the community

#### Impact

• Led co-ops to establish broader health program through partnerships with local health officials

#### Chiapas (2006-2012)

- Introduced Single Visit Approach (SVA) for screening and treatment
- Strengthened clinical training curriculum for local providers & awarded certifications of competency
- Developed and implemented strategy to build capacity of co-op partners to manage health programs

#### Impact

- Significantly increased overall accessibility and effectiveness of cervical cancer prevention services
- Increased knowledge and skills of local partners to plan and manage community health programs,
- Influenced co-op's decision to incorporate health activities into organizational work plans & budgets

Key Program Indicators	
Community health promoters trained	212
Doctors and nurses trained	172
Dysplasia clinics equipped	6
Women screened through all GFH campaigns and by GFH-trained providers outside of campaigns*	17,768
Women screened through campaigns using Single Visit Approach	4,388
Women with abnormal results screened through SVA campaigns (VIA+/CIN2 or greater, or suspicious for cancer)	352 (8%)
Women with abnormal results screened through SVA campaigns who met treatment criteria	312 (89%)
Women with abnormal result and eligible for treatment who received treatment during SVA campaigns	285 (91%)

\* Actual number is much higher. Grounds for Health only tracked the number of women screened by GFH-trained providers outside of campaigns from 2010-2012, and only in Chiapas.

<sup>\*\*</sup>Does not reflect women whose treatment was deferred for various reasons, or who were referred to higher level.

# Prologue

The work of Grounds for Health started in Mexico seventeen years ago in response to the high rates of cervical cancer among coffee growers and their families in rural Oaxaca. It started at a time when the only available screening method was the Pap smear, and the program sought to ensure that each woman from the community had access to high-quality Pap testing. The program began with a group of American health care volunteers taking Pap smears and sending them off to the state-run lab in Oaxaca. After six months of no results, they realized the state lab was unable to meet the demand and so teams of cytologists and pathologists flew down twice a year to read the Pap smears. Over time, Grounds for Health staff realized that the needs went far beyond taking Pap smears and giving women their results.

In 2000, the founders incorporated Grounds for Health as a non-profit organization, formed a board of directors and hired an executive director. The annual operating budget at this time was approximately one hundred thousand dollars. In 2004, the board of directors hired August Burns, a Masters of Public Health, midwife and clinician as the new executive director. Ms. Burns' background combined clinical expertise in women's health with extensive international public health experience. At the time of hire, the program model focused on bringing volunteers down to Mexico to conduct semi-annual Pap campaigns and community education. The program's broad goal was to improve the capacity of the local health system, yet there was no formal training curriculum or any plans to transfer ownership of the program to the local partners.

Grounds for Health has grown from those early efforts into a model of community-based, sustainable programs for cervical cancer prevention with an operating budget of approximately one million dollars. Through partnering with local Ministries of Health and coffee cooperatives that serve as the liaison with the community, Grounds for Health develops locally managed, effective and sustainable cervical cancer prevention programs.

In 2007, one year after the World Health Organization (WHO) released the manual, <u>Comprehensive</u> <u>Cervical Cancer Control: A guide to essential practice</u>, Grounds for Health made the decision to incorporate Visual Inspection with Acetic Acid or (VIA) as a primary screening test. At the time of publication in 2006, VIA had shown promise in controlled trials, but research on the effectiveness of the test when implemented on a large scale was ongoing and results were not yet available. Since then, VIA has proven to perform as well or better than the Pap test in detecting precancerous lesions and has been adopted as the screening method of choice for countries around the world.

Though Grounds for Health got its start in Mexico and had tremendous success in three different states, the Mexican Ministry of Health has decided to invest in higher tech solutions to address cervical cancer including HPV and Pap testing as a first line for screening. As HPV testing is not feasible in most rural low-resource settings, Grounds for Health has determined that our efforts will have the greatest impact in countries that are aligned with our goal of establishing effective screening and treatment programs that are sustainable in rural communities.

Through its work in Mexico, Grounds for Health is incredibly thankful for the experience gained and the lessons learned about the importance of strong relationships with community partners. Grounds for Health is now in the process of creating the tools and materials to share its success stories with the global community.

# Introduction

From 1996 to 2012, Grounds for Health worked with coffee farming communities in Mexico to improve cervical cancer prevention services and reduce unnecessary deaths from cervical cancer. The connection between coffee communities and cervical cancer began as a result of a friendship between a coffee businessman and an American gynecologist, and their chance meeting with a doctor in a coffee-growing region of Mexico while visiting the area in 1996. Spurred by the realization that cervical cancer, a preventable disease, was a major cause of death among women in coffee-farming communities, the three parties formed an unlikely partnership between coffee-growers, health care workers and coffee businesses to prevent cervical cancer.

This unique partnership has become a major component of the Grounds for Health model and the key to its success. Grounds for Health has consistently received more than 95% of its funding from the specialty coffee industry which has allowed it the flexibility necessary to innovate and expand. This model aligns the coffee industry's investments in the health and well-being of coffee farmers with the interests of the cooperative in gaining visibility and attracting potential buyers and new members. In addition, the premium paid to farmers through Fair Trade Certification, which requires a portion of the additional income be used for social programs, has allowed the cooperatives play an active role in the program. Co-op's have used Fair Trade premiums in a variety of ways, such as, to transport women to screening, provide economic support to families with women suffering from cancer, and to refill empty gas tanks to ensure timely treatment and continuation of services.

During its' sixteen-year history of working in Mexico, Grounds for Health developed and refined an innovative community-based model to address barriers to effective cervical cancer screening and treatment services in low-resource settings. This model featured large scale, highly visible screening campaigns staffed by Grounds for Health, local health care providers and US medical volunteers, and mobilized co-op resources and community health promoters to reduce the traditional barriers to access that rural women face.

Now, having transitioned responsibility for its programs in Mexico to local partners at each site and successfully replicated the same community partnership model in Nicaragua, Peru and Tanzania, Grounds for Health offers this account of our experience working to improve cervical cancer screening and treatment services in rural Mexico. By sharing the methodology, objectives, achievements, and unexpected findings from each of our three programs in Mexico, we hope to distill valuable lessons and inform best practices for community-based cervical cancer prevention programs around the world.

# **Background and context**

# Cervical cancer prevention: a question of appropriate technology

Despite Mexico's status as an upper-middle-income country, 51.3% of the population lives below the poverty line,<sup>1</sup> an indication of gross economic disparity that plays out in basic health indicators. In Mexico, cervical cancer ranks as the second most common cancer among women.<sup>2</sup> Though it is

<sup>&</sup>lt;sup>1</sup> World Bank. World Development Indicators. http://data.worldbank.org/country/mexico. Accessed Oct 6, 2012.

<sup>&</sup>lt;sup>2</sup> WHO/ICO Information Centre on HPV and Cervical Cancer. Human Papillomavirus and Related Cancers, Summary Report Update. Sept 15, 2010. www.who.int/hpvcentre. Accessed Oct. 7. 2011.

easily preventable through early detection and treatment, many women—particularly in rural areas lack the information, resources, time, transportation, money and social permission to seek the services they need. Existing screening services rely primarily on resource-intensive cytology (Pap) systems that have been ineffective in reducing the burden of cervical cancer in rural areas.

At the time Grounds for Health began working in Mexico, an evaluation of the Mexican National Program for Early Cervical Cancer Detection revealed 64 percent the of Pap smear samples lacked the endocervical cells necessary to test for disease and that fewer than 8 percent of Pap smears were of high quality.<sup>3</sup> False negatives or missing results are common due to quality control issues and unmanageable backlogs perpetuated by norms that require repeat testing every 6-12 months. For women who do receive a positive result, there is little assurance that they will ever receive treatment. The literature suggests that for each visit required between screening and treatment, 10-25 percent of women do not return, <sup>4</sup> and that as few as 25 percent of women with a positive Pap test ever receive treatment<sup>5</sup>.

Although new technologies such as the HPV vaccine and HPV DNA testing are being introduced throughout Mexico, at present, neither is a feasible solution for those women who have already been exposed to the HPV virus (in the case of the vaccine) or for those living in rural, low-resource communities. In these settings, the HPV test encounters the same challenges that have rendered the Pap test ineffective—a lack of laboratory resources and no systems for ensuring women get their result and the treatment they need.

Cervical cancer prevention efforts in Mexico are further complicated by the existence of numerous health systems, each with overlapping jurisdictions and differing norms. At the state and municipal level, there is the highly political DIF (Integrated Family Development/Desarrollo Integral de la Familia) system that is a social service entity traditionally presided over by the wife of each state and municipal president – most of whom have little or no public health background. In addition, each municipal government has its own budget for health programs that are independent of the DIF. At the national level, there is the Secretariat of Health (SSA), which provides direct care in addition to overseeing IMSS, the National Social Security system. Finally, there is an active private system, generally regarded as higher in quality than any of the public systems, where women often turn to for second opinions or expensive procedures. In Mexico, it is not uncommon for women to receive conflicting information from multiple providers about their screening results, and they are frequently referred for unnecessary procedures. Yet, they often still do not receive life-saving care when they need it.

If screening is not linked to treatment, women who screen positive often do not or cannot return for subsequent visits. Grounds for Health's experience in Mexico is in large part a case study of trial and error in reducing this phenomenon, known as "loss to follow-up."

 <sup>&</sup>lt;sup>3</sup> Lazcano-Ponce, E.C et al. Evaluation Model of the Mexican National Program for Early Cervical Cancer Detection and Proposals for a New Approach. *Cancer Causes and Control.* 9: 241-251 (1998).
 <sup>4</sup> Bradley, J. eta al. "Delivering Cervical Cancer Prevention in Low-Resource Settings." *International Journal of Gynecology and Obstetrics*.

<sup>&</sup>lt;sup>4</sup> Bradley, J. eta al. "Delivering Cervical Cancer Prevention in Low-Resource Settings." *International Journal of Gynecology and Obstetrics*, 2005, 89 S21- S29.

<sup>&</sup>lt;sup>5</sup> Luciani, Silvana (PAHO); Winkler, Jenny (PATH). Cervical Cancer Prevention in Peru: Lessons Learned from the TATI Demonstration Project. Pan American Health Organization, 2006.

# Beliefs and practices related to cervical cancer in rural Mexico

Each of the coffee-growing regions where Grounds for Health worked harbored a wide range of beliefs and practices surrounding cervical cancer. While women in many communities served by the IMSS social welfare program, *Oportunidades*, were accustomed to getting the Pap test, those living in communities not reached by this program were unfamiliar with the Pap test and had heard very little about cervical cancer. In communities that had access to Pap testing as well as those that did not, misinformation about cervical cancer, what caused it, how to prevent it, and fears about the screening and treatment procedures prevailed. Many women were reluctant to get screened due to shame, fear of a positive result, and/or because their husbands forbade it.

Grounds for Health gathered information about the local beliefs and practices through conversations with providers and community members over the course of each program. Common misperceptions and cultural beliefs surrounding cervical cancer screening and treatment at the community level included:

- The testing procedure is shameful, painful, embarrassing, etc.
- If a woman has a positive screening test, it means she is promiscuous.
- It is unacceptable for anyone other than a woman's husband to see her vagina.
- The test and/or treatment will prevent you from having children.
- If you have HPV you will get cancer.
- A positive screening test means you have cancer and will probably die.
- The treatment is very expensive and your family will have to sell everything and go into debt in order to pay for it.
- An operation is required if you have a positive screening test.

Among health workers, misinformation about cervical cancer and the appropriate methods for treatment of early disease was also rampant. Over the course of the program, Grounds for Health heard numerous examples of misinformation about cervical cancer screening and treatment from providers at all levels of the health care system, including:

- A doctor in charge of training in the municipality of Siltepec, Chiapas referred to low-grade lesions, which often resolve themselves and do not require treatment, as "cases of cervical cancer."<sup>6</sup>
- Many providers incorrectly identified normal, healthy cervixes, as "ulcerated," "tumorous" or "inflamed" and referred women to specialists for unnecessary procedures, sometimes leading to costly and invasive testing and even treatment.
- Virtually all providers taking Pap tests had been trained incorrectly on how to take a sample, and as a result, a very large portion of Pap samples were deemed "insufficient," or the results were unreliable.
- Providers routinely referred women with abnormal results for inappropriate follow-up procedures, leading to incorrect diagnosis, inappropriate treatment, and loss to follow-up.

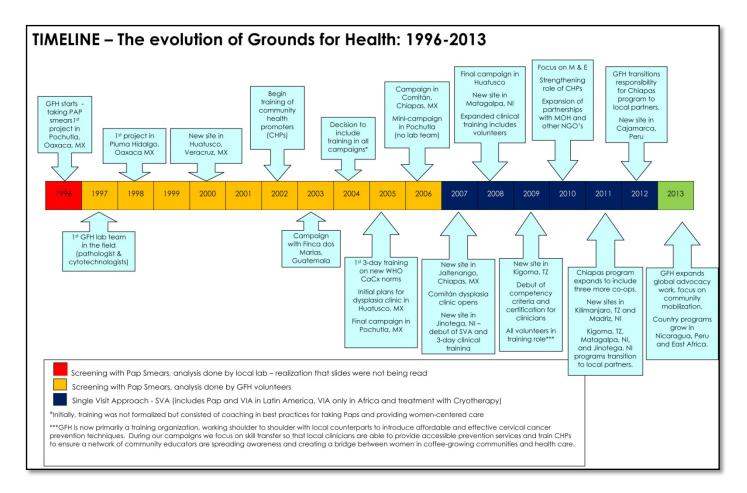
In order to reach the goal of improving cervical cancer prevention services, a major component of Grounds for Health's work centered on providing accurate information to health care providers and

<sup>&</sup>lt;sup>6</sup> Historical program documents reference research showing that >40% of Mexican docs had performed hysterectomies to treat abnormal Paps.

community members, correcting misinformation, reducing stigma, and changing deeply rooted cultural beliefs and practices surrounding women's health.

# **Program History**

From 1996 to 2012, Grounds for Health evolved from a small project working in one community in Mexico, into a capacity-building organization that is establishing locally sustainable and effective cervical cancer prevention programs around the world. Throughout its sixteen-year history, Grounds for Health has worked in various coffee-growing communities in Mexico, starting in Oaxaca in 1996, gradually expanding to Veracruz in 2000 and to Chiapas in 2006. At each new site, Grounds for Health applied the lessons learned from prior experience in order to shape a more effective program.



In 1996, the founders of Grounds for Health, a coffee businessman from Vermont and a retired gynecologist from Arizona, organized the first cervical cancer screening campaign in Pochutla. During this first trip, Pap smears were sent to the local lab for analysis. After a short time, however, it became apparent that the local laboratory was not reading the Pap smears. Recognizing that the existing system was strained to the point of complete dysfunction, in 1997, Grounds for Health began the practice of bringing its own team of volunteer cytotechnologists and pathologists to each

campaign. These volunteers would set up a temporary lab to process the Pap smears and provide results by the end of the campaign week.

In 2002, Grounds for Health developed and implemented a community education plan and trained community health promoters to increase awareness of cervical cancer within their communities, bring women to care, and help ensure follow-up for women with positive results. These trainings equipped promoters with the knowledge and skills necessary to address common misconceptions about cervical cancer screening, recruit women in the appropriate age group, and serve as a link between health services and their communities. Co-op partners supported the community health promoters and provided transportation and financial support to ensure that women returned to the health center for appropriate treatment.

### Coffee, coffee cooperatives and community health

Coffee is the second most traded commodity in the world after petroleum. An estimated 25 million people make their living growing coffee, and Mexico is the world's fifth largest producer and exporter of coffee.\* Because coffee is grown in tropical, rural mountainous areas, coffee farmers' access to basic health services is typically limited by lack of roads, transportation, health facilities, health providers and poverty. Additionally, women comprise a significant portion of the workforce in coffee production, typically performing at least 70 percent of the fieldwork, harvesting, and sorting of coffee.\* Women are disproportionately affected by the health and economic disparities throughout the world, and this inequality is heightened in low-resource, coffee-growing communities.

Coffee cooperatives are groups of farming families working together to improve farming techniques, coffee quality, and marketing ability. Through these joint efforts they are able to increase their selling price of coffee and standard of living. Health and well being are essential to the economic success of the co-op and the prosperity of the community. When a woman falls sick with cervical cancer, she is no longer able to contribute to coffee production work, care for her children, and feed her family. In coffee co-ops, women's health issues are community issues.

Coffee cooperatives have played an essential role as local partners since the beginning of Grounds for Health's program. In addition to providing on-site logistical support, co-ops' knowledge of cultural norms, reputation as an economic power in the region, and position as a trusted advocate for the community, proved vital in influencing women's health-seeking behavior and in lobbying for a more equitable allocation of scarce health resources at the local level.

\*\* Global Exchange, Coffee FAQ. http://www.globalexchange.org/fairtrade/coffee/faq. Accessed 1/28/2013.

<sup>\* &</sup>quot;Women and the Global Marketplace," Women and Trade: Gender Equality & Empowering Women. International Trade Forum. Issue 3&4. 2008

In 2004, under the direction of new executive director August Burns, Grounds for Health shifted focus from being a provider of direct services, to training in cervical cancer prevention in order to strengthen local capacity and permanent services. At this time, trainings included a review of the Mexican national norms, proper Pap sampling technique, and modeling women-centered care to local doctors and nurses. This training included one or more days of classroom instruction followed by a cervical cancer screening campaign in which the local providers practiced their new skills under the supervision of Grounds for Health staff and US medical volunteers. The Grounds for Health team worked alongside local providers during the campaigns, serving as trainers and mentors, modeling the techniques, and ensuring overall quality of services.

A major change came about in 2007, when Grounds for Health adopted the Single Visit Approach (SVA), an innovative method that uses Visual Inspection with Acetic Acid (VIA) for screening, combined with same-day treatment using cryotherapy (freezing abnormal cells). Although cryotherapy had been developed decades ago, and the International Agency for Research on Cancer had been exploring visualization without magnification for some years, it was not until 1999 when the Bill and Melinda Gates Foundation funded the Alliance for Cervical Cancer Prevention (ACCP), that VIA as a test and the SVA as a management approach began to be rigorously assessed as a viable cervical cancer prevention strategy.<sup>7</sup>

In 2001, the WHO organized a comprehensive consultancy on cervical cancer, where the Alliance for Cervical Cancer Prevention presented its findings that VIA was a highly effective screening test. In another major breakthrough from this research, VIA was paired with cryotherapy to offer a highly effective and affordable approach to cervical cancer prevention that linked screening with treatment on the same day. Also known as "see and treat" or "screen and treat," the method was identified by ACCP as the most efficient and effective strategy currently available for the prevention of cervical cancer.\*

\* ACCP. Ten Key Findings and Recommendations for Effective Cervical Cancer Screening and Treatment Programs. 2007 April. http://www.alliance-cxca.org/

The original "Screen & Treat Training Manual" used by Grounds for Health in Mexico was derived from the TATI Demonstration Project (named for the acronym in Spanish for screen-and-treat) implemented by the Pan American Health Organization and the Peruvian Ministry of Health. Later, Grounds for Health developed its own curriculum derived from Jhpiego's clinical training on VIA and cryotherapy but with additional modifications based on its own experience. Modifications included a user-friendly format that was more appropriate for mid-level providers, vision tests and provision of reading glasses for doctors and nurses who needed them to see details on the cervix.

The program's monitoring plan during the first several years tracked the number of women screened by the Grounds for Health team during campaigns and the results of their screening tests. Though capacity building was part of the overall goal of the program, the number of trainings, providers

<sup>&</sup>lt;sup>7</sup> Historical information about the research and development of VIA and cryotherapy supplied by Lynne Gaffikin.

trained, and related indicators were not captured systematically until 2005. Gradually, the monitoring plan adopted indicators related to capacity building, starting with the number of participants who attended trainings, and used pre- and post-tests to evaluate the effectiveness of the training. In 2010, staff developed tools to track the productivity of local providers after the training in order to measure the longer-term outcomes of the program.

As the program expanded to new sites in Mexico (and eventually to other countries in Latin America and East Africa), Grounds for Health continued to work with co-op partners to improve their capacity to manage community health programs. In 2005, Grounds for Health determined that the co-op partners in Oaxaca had gained the knowledge and resources necessary to continue the cervical cancer screening and treatment services on their own. They had a well-functioning dysplasia clinic with expert local providers trained in cervical cancer prevention, a strong network of community health promoters, and the know-how to facilitate access to needed health services for women in their communities. It was then that Grounds for Health achieved its initial goal in Pochutla and adopted as its core mission: to cultivate partnerships with coffee-farming communities to create *locally sustainable* cervical cancer prevention programs with the ultimate goal of transitioning full responsibility for each program to local partners. This mission would enable Grounds for Health to bring the same model to other communities around the globe.

# **Program Sites**

# Oaxaca, Mexico

In the spring of 1996, the founders of Grounds for Health visited a local hospital in Pochutla, Oaxaca to gain a better understanding of the health services that were available to coffee-farming communities. As described above, their findings revealed an alarmingly high rate of cervical cancer and the requisite motivation to address the problem. They took action, launching a small project to improve cervical cancer prevention services in the community. With time and success, the project drew the support of many local factions including the coffee-farming cooperative, the Aztec Cooperative Union, the local DIF, the Pochutla Hospital, the municipal president of Pochutla, and finally, health authorities in Mexico City.

# Site Background

The coffee producers of the Aztec Cooperative Union reside in the communities of Pochutla and Pluma Hidalgo in the southwestern coastal state of Oaxaca, Mexico. The state is primarily agricultural with a small tourism industry on the coast. Oaxaca is among the poorest states in Mexico and has the highest concentration of indigenous groups at 57% of the population.<sup>8</sup> Most inhabitants live in rural, isolated communities with very limited access to health services. Coffee is the main cash crop in the region. The general hospital in Pochutla services all the municipalities in the coastal area, a population of approximately 120,000 at the time of the collaboration.

<sup>&</sup>lt;sup>8</sup> INEGI. Conteo de Poblacion y Vivienda. Mexico, 1995.

When Grounds for Health started there, the coastal area was reported to have the highest burden of cervical cancer in all of Mexico.9 On the whole, cervical cancer prevention services were underutilized and unreliable. The state system offered free Pap testing but the samples had to be taken to a lab over six hours away by car, and processing them took six to eight months. In a study of women in rural areas of Oaxaca, 70 percent of those interviewed reported having never received a Pap test.<sup>10</sup> Due to lack of awareness, most women did not seek care until they were already experiencing symptoms and presented with advanced cases of cervical cancer.

## Goals and Methodology

The goal set forth by the collaborators at the beginning of the program was to make lasting improvements to the health care system servicing the Aztec Cooperative Union's communities in Pochutla and Pluma Hidalgo, Oaxaca. Local partners and Ground for Health founders agreed to focus on cervical cancer prevention due to the high mortality rate in the area and because they felt they had the knowledge and the means to prevent it. Methods centered on training providers at the local hospital in Pochutla on Pap sampling, colposcopy and LEEP,<sup>11</sup> establishing a dysplasia clinic to treat pre-cancers, and increasing uptake of screening through community outreach and education. All women of reproductive age and those who were post-menopausal were eligible to participate in the program.

From 1998-2004, a team of US medical volunteers traveled to Pochutla twice per year on average to work with local health providers and conduct cervical cancer screening campaigns in Pluma Hidalgo and Pochutla, Oaxaca, screening approximately 400 women during each campaign. After discovering that the state laboratory was unreliable, US cytopathologists and cytotechnologists joined the team of medical volunteers and set up a temporary laboratory in Pochutla during each trip to read the Pap smears.

Efforts to strengthen cervical cancer prevention services were matched by a highly motivated team of local providers, the Aztec co-op, and the local DIF. Prior to each visit, the DIF and coffee co-op would publicize the screening campaign in the communities and encourage women to participate. The co-op played a vital role in escorting US medical volunteers up and down the mountains, making the necessary political contacts, and providing room, board and security. The hospital staff assumed responsibility for communications and record keeping, absorbed the postage costs for mailing results, and worked additional hours without pay in order to keep the project moving forward. The local DIF ensured women received the appropriate follow-up care, providing transport to the city of Oaxaca for treatment at the oncology center as well as financial support for those undergoing radiation therapy.

To monitor and evaluate the results of the program in Oaxaca, Grounds for Health maintained records of major equipment donations, the number of community health promoters trained, the number of women screened during each campaign, and the number of women with abnormal results. Local partners kept track of the number of women with abnormal results who received treatment and shared this information with Grounds for Health, although it was not included in the organization's monitoring plan.

<sup>&</sup>lt;sup>9</sup> Grounds for Health written communication based on conversations with local cervical cancer providers. 1996-1998.

<sup>&</sup>lt;sup>10</sup> Lazcano-Ponce, E.C. et al. The Cervical Cancer Screening Program in Mexico: Problems with Access and Coverage. Cancer Cases and *Control.* 8:698:-704 (1997). <sup>11</sup> The *loop electrosurgical excision procedure (LEEP)* uses a thin, low-voltage electrified wire loop to cut out abnormal tissue in the cervix.

# Activities and Outcomes

**Clinical training for local providers** – Grounds for Health co-founder, Francis Fote, OBGYN led the early trainings for a few local providers. The clinical trainings consisted of modeling correct use of the techniques, supervised clinical practice, and distance support and mentoring. Two gynecologists went on to receive training in colposcopy and LEEP as well as technical assistance in establishing protocols, handling referrals, and maintaining records.

In 2005, Grounds for Health conducted a two-day workshop for approximately 40 local providers, (33 community nursing assistants and a handful of nurses and doctors serving in the area temporarily to fulfill their social service obligation). The purpose of this training was to provide an overview of the Mexican cervical cancer norms and a preview of the new WHO guidelines on cervical cancer control, slated for publication in 2006. This marked the beginning of Grounds for Health's initiative to develop a formal curriculum on cervical cancer prevention tailored to primary care providers working in low-resources settings.

**Community education** – In order to increase uptake of screening services, Grounds for Health worked closely with the Aztec co-op and the municipal local health authorities to develop a culturally acceptable method of community education and outreach. Program staff designed and carried out an assessment to understand the knowledge, attitudes and behaviors regarding cervical cancer in Pochutla, Oaxaca and used the information to train 33 male and female community health promoters over the course of the collaboration.

**Pap campaigns** – Between 1996 and 2004, Grounds for Health conducted more than six cervical cancer prevention campaigns in Pochutla and Pluma Hidalgo and screened 3,889 women. A total of 79 women (2.03%) were diagnosed with high grade changes on their Pap test, including 15 (0.39%) with possible cancer.<sup>12</sup> Prior to the opening of the dysplasia clinic in 1999, all women with abnormal results were referred for further treatment at the regional hospital in Oaxaca City. The DIF and the Aztec co-op tracked these women, helped coordinate transport to the regional hospital, and ensured that they were able to access care. Following the opening of the dysplasia clinic, all women with abnormal results not suspicious for cancer were treated by one of the two gynecologists in Pochutla. Those with invasive cancer were transferred to the oncology center in Oaxaca City. A summary of campaign results is presented in **Table E.** 

**Dysplasia clinic established in Pochutla** – In 1999, the coalition of local partners and US-based volunteers successfully advocated for and contributed to the creation of a dysplasia clinic at the Pochutla General Hospital. The founders of Grounds for Health equipped the clinic with two colposcopes, a LEEP machine, a smoke evacuator, and other essential supplies for cervical cancer prevention. With the opening of the clinic in 1999, women from Pochutla, Pluma Hidalgo and neighboring municipalities no longer had to travel to the referral hospital in Oaxaca City six hours away for prevention services.

**On-going services provided by local doctors and nurses** – Within one year of opening the dysplasia clinic, the local gynecologist in charge of the clinic had provided cervical cancer prevention services to over 1,000 women. In addition, he was routinely sending comprehensive reports to the regional Ministry of Health at the state capital in Oaxaca City informing them of the results of the

<sup>&</sup>lt;sup>12</sup> As a comparison, in the US around 1.10% of Pap smears results are high grade, and .10% are cancer.

program. These reports generated an overwhelming response at the state and national level (see impact below).

**Transition to local ownership** – Though the program had largely achieved its goals by 2000, Grounds for Health continued supporting the program by sending teams of medical volunteers to conduct campaigns until 2005. The continued support of Grounds for Health was deemed necessary during this time due to the continued challenges with the cytology system and the inability of the state laboratory to reliably process Pap smears.

In 2004, Grounds for Health re-assessed the capacity of the local partners and determined the Pochutla hospital staff and dysplasia clinic were well equipped to continue on their own. In consultation with the local partners, plans were made for the hospital to take responsibility for running annual campaigns for women in the outlying areas. To resolve the issue with getting Paps read, health authorities advocated for the municipal government to hire a resident cytologist to serve the coastal region.

# Impacts

By 2000, the primary objective of improving the health care system for co-op communities had been reached. The Dysplasia Clinic at Pochutla General Hospital was formally opened in October 1999, becoming the third clinic qualified to provide comprehensive cervical cancer prevention services in Oaxaca. The clinic remained open five days a week and served approximately 100 patients per week. The local doctor in charge of the program had been accepted for and completed a six-month fellowship on colposcopy in Mexico City, becoming one of few experts in the region, and continued to practice full time in Pochutla.

The reports on the productivity of the dysplasia clinic generated by the gynecologist for the Oaxaca Ministry of Health led to further efforts to address cervical cancer at the state and national level. Thirty thousand dollars worth of additional equipment was delivered to Pochutla. In addition, the national Ministry of Health authorized the creation of four mobile units for cervical cancer prevention. These mobile units were equipped with colposcopy, LEEP, smoke extractors, microscopes and the other supplies necessary to provide the same model of care as in Pochutla. Each unit was deployed to one of the four states in Mexico (including one in Oaxaca) with the highest incidence of cervical cancer for use in isolated indigenous communities.

In addition to improving the quality of cervical cancer screening services, the program model of a strong community partnership significantly reduced barriers faced by women in the community. The hospital authorities initially committed to providing services to low-income patients, offering services on a sliding scale starting at zero for patients in the lowest income bracket.<sup>13</sup> Demand for services also increased as the program developed as evidenced by the increase in numbers of women presenting for screening services.

Grounds for Health executive director returned to Pochutla in 2010 to conduct interviews with the director of the dysplasia clinic, co-op staff and community women. The findings from these

<sup>&</sup>lt;sup>13</sup> In 2010, members of the Pluma Hidalgo community revealed that the clinic was charging high fees and that their women now made a long journey in the other direction for free services.

interviews are included in the **Qualitative Results** section as part of the **Results for All Program** Sites.

# Veracruz, Mexico

In 2000, Grounds for Health received an invitation from the cooperative group, La Union Regional de Pequeños Productores de Café (referred to hereafter as La Union Huatusco or the Huatusco coop) to expand its program to Huatusco, a municipality in the state of Veracruz. This collaboration continued until 2008, overlapping with the Oaxaca program until the transfer to local ownership in 2005.

# Site Background

The state of Veracruz is located in the east central part of Mexico bordering the states of Oaxaca and Chiapas to the south and the Gulf of Mexico to the east. Its capital is Xalapa, located in the northern part of the state. With 6.9 million inhabitants, the state of Veracruz is the third most populous in the nation, after the Federal District and the state of México. Agriculture is the main economic activity in Veracruz with products including coffee, lime, and cane sugar.

Grounds for Health worked in partnership with the coffee co-op La Union Huatusco and the Centro de Salud Urbano de Huatusco, a clinic in the outskirts of the city that offers free outpatient and prevention services. The co-op includes 2,000 regular members and 3,000 affiliated members who occasionally sell their coffee through the cooperative. The co-op's geographical catchment area is home to 200,000 inhabitants, 70 percent of whom live in rural areas. For most women in the region, travel to cities is prohibitively expensive. According to the co-op, a trip to the city costs as much as two week's worth of food for an entire family.

# Goals and Methodology

Though there was no formal collaborative agreement between Grounds for Health and the local partners in Huatusco, the goals of the partnership were consistent with Grounds for Health's organizational mission to strengthen cervical cancer prevention services in coffee-growing communities. The objectives centered on providing cervical cancer screening services and improving access to follow-up for women with abnormal results. Though in the initial years of the collaboration, the co-op relied on Grounds for Health to organize and implement most of the activities with their support, the cooperative and the clinic gradually assumed more and more responsibility for managing the program. Along with local partner capacity building, additions to the work plan in 2006 included community health promoter trainings and the establishment of a local treatment facility for women with abnormal Pap results.

Throughout the Huatusco collaboration, the program continued to organize large bi-annual Pap campaigns. As many as 1,000 women received Pap tests during each campaign. In addition, women were offered clinical breast exams followed by fine needle biopsy as appropriate for serious lumps. US cytotechnologists and pathologists processed Pap smears and biopsies daily throughout the campaigns and women with abnormal results were contacted the same day if possible and brought

back to the clinic for colposcopy or further evaluation as needed. Initially, all women between 25 and 55 were deemed eligible for screening. However, as more research came out indicating that screening prior to age 30 was unnecessary, the program narrowed the eligibility criteria to target women between 30 and 55 who had not been screened within the last three years.

In year four of the collaboration, a female member of the co-op staff was named as the official coop coordinator for the project and helped to organize all project activities in collaboration with Grounds for Health staff in Vermont. The co-op's primary responsibilities included recruiting women from their communities and ensuring that women who needed further treatment received it. To that end, the co-op provided transportation as needed and kept spreadsheets on each woman's visits and outcomes. Since the program was still Pap-based and did not include any provision for treatment locally, women who tested positive for pre-cancers or cancer needed to travel two to four hours one way for a minimum of three visits. The co-op organized and provided the transport whenever resources allowed.

# Activities and Outcomes

**Pap campaigns** – Between October 2000 and April 2008, Grounds for Health conducted eight cervical cancer prevention campaigns in Huatusco and screened 6,176 women. A total of 97 women (1.57 %) were diagnosed with high-grade changes on their Pap test, including 11 (0.19 %) with possible cancer. Ninety of these women were screened during the first seven campaigns that offered detection only, and all were referred for further treatment at the regional hospital. The Huatusco co-op tracked all women needing follow-up, helped to coordinate transport to the regional hospital, and ensured that they were able to access care. The remaining seven women with abnormal results were those screened in April 2008, the only campaign in Huatusco where Grounds for Health was able to offer immediate treatment with cryotherapy. All women with abnormal Pap findings who met the criteria for cryotherapy at this campaign received treatment immediately. A summary of campaign results is presented in **Table E**.

**Formation of a network of community health promoters** – From 2000 to 2006, the co-op promoted campaigns by making general announcements in each community in advance of the activity. In 2004, the Huatusco co-op began discussing a plan to create a network of community health promoters. The plan was realized in March 2006 when the co-op convened a meeting with the designated promoters and established formal commitments to support the network. Included in the agreement were: support for trainings and related activities, educational materials, transport for campaigns and treatments, and support for the promoters to manage a community fund for women needing follow-up care. The agreement was signed by a designated representative of the promoters, the co-op, and Grounds for Health.

**Community health promoter trainings** – In response to the co-op's decision to form a network of community health promoters, Grounds for Health committed to training the promoters to educate community members about cervical cancer prevention. A total of 41 promoters were trained between 2006 and 2008.

**Meeting with senior health authorities to establish plan for dysplasia clinic** – In October 2005, Grounds for Health initiated a plan to develop a dysplasia clinic in Huatusco. Program staff met with the regional Ministry of Health's head of Reproductive Health from Xalapa, the Director

of Hospitals for the State of Veracruz, the Director of Reproductive Health for the district of Cordoba, and the directors of the local hospital and health center. The need, justification of the investment, and roles of each partner were agreed upon.

**Donation of equipment to establish dysplasia clinic** – In September 2006, Grounds for Health donated a colposcopy machine, a cryotherapy unit and gas tank, and cervical and endocervical biopsy punches to the Health Services of Veracruz for use at the Huatusco General Hospital, which covered 12 Veracruz municipalities plus the Highland Puebla zone. The total donation was valued at approximately \$6,750. Unfortunately, as of 2010, the local treatment facility had still not opened, as the public officials had been unable to contract an OBGYN to manage the clinic. The Huastusco co-op, however, was continuing to advocate for the opening of the clinic with the local health authorities.

# **Impacts**

At the end of the collaboration, the cooperative presented a summary of the results of their work. According to the co-op summary, all women with abnormalities received treatment. Although the dysplasia clinic had been delayed in opening, the co-op had developed agreements with the municipal health authorities to activate the dysplasia clinic.

In 2005, four years into the collaboration with Grounds for Health, the co-op announced plans to start a new health initiative. With technical assistance from Grounds for Health, the co-op met with hospital officials to better understand the system and developed a plan to improve access to care for their member communities. In 2008, as Grounds for Health closed its program, the co-op hired a physician to provide preventive health services to their rural members during regular community visits. The services prioritized included administering vaccines and screening for hypertension, diabetes and, of course, cervical cancer. In 2009, a co-op coordinator contacted Grounds for Health with the following update:

We have just completed our third vaccination campaign as of Friday, January 23rd. It was a total success and with the support of the health center, we gave flu vaccinations to 1,384 people in coffee communities where the Union Regional has a presence.

We are also planning our 10th campaign for the early detection of cervical cancer, and with the support of the health center, hospital and jurisdictional authorities from Cordoba are planning to coordinate services for the end of February.

These co-op-led initiatives demonstrated the power of community ownership and showed that wellorganized community groups, such as coffee cooperatives, are able to leverage their influence with the local community and public officials to increase access to healthcare in low-resource communities and serve as a vehicle for facilitating health service-delivery.

In 2010, Grounds for Health's executive director returned to Huatusco to interview the co-op staff and learn more about the results of the program since the co-op had assumed responsibility. Findings are presented under the **Qualitative Results** for all sites at the end of the **Program Site** section.

# Chiapas, Mexico

Grounds for Health began working in Chiapas in 2006, initially as part of a short-term collaboration with a local family planning organization, Marie Stopes International (MSI), in the town of Comitan. Grounds for Health initiated the partnership with the goals of learning more about the region and to demonstrate to MSI the value of community engagement to increase demand for and access to services. The follow-on project in Comitan aimed to expand cervical cancer screening services to the broader community and develop the first public dysplasia clinic in the region.

## **Comitan Dysplasia Clinic**

The town of Comitan, in the south-central part of Chiapas, has a population of over 100,000. As of 2006, the closest treatment facilities for women with abnormal Pap smears was located in the state capital of Tuxtla Gutierrez, over seven hours away over very difficult roads. Therefore, almost no women received treatment after screening, rendering screening programs of little to no value.

While partnering with the Marie Stopes clinic in Comitan, Grounds for Health met with a local OBGYN, Dr Barragan, to discuss solutions to this problem. A long time advocate for improving women's access to care, Dr. Barragan presented a proposal to establish local services. At the time, the only equipment he had was an ancient colposcope with a bulb dangling precariously from the lens case. Leveraging its connection with the coffee industry, Grounds for Health secured funding from ECOM Foundation and helped develop plans to establish a center for the early detection and treatment of cervical cancer in Comitan. The new center would include the ability to provide Pap, colpo, cryo and LEEP. Grounds for Health managed the renovation and equipping of the clinic in collaboration with local partners. The center opened less than a year later and quickly became the referral center for the entire region. Since that time, the center has been relocated to a wing of the municipal hospital and has expanded its services to become part of an integrated women's health program. They now have the capacity to see thousands of women each year right in their own community.

Also in 2006, Grounds for Health received an invitation to establish a new cervical cancer prevention program in collaboration with first one, and then four coffee cooperatives in the municipalities of Angel Albino Corzo, Siltepec, Montecristo de Guerrero, and La Concordia.

# Site Background

Chiapas is the southern-most state of Mexico, located southwest of Oaxaca along the Pacific Coast and bordering Guatemala to the southeast. Of the 4.3 million people in Chiapas, most are poor, rural famers. The overall literacy rate in Chiapas was estimated to be 23 percent in 2012<sup>14</sup>. With nine major ethnicities and nearly one million indigenous language speakers, the state has the second largest indigenous population in Mexico, second only to Oaxaca. About one quarter of the overall population in Chiapas is of Mayan decent, and in rural areas many do not speak Spanish.

The collaboration with coffee cooperatives began when Grounds for Health's co-op partner in Veracruz introduced Grounds for Health staff to their colleagues at CESMACH (Campesinos

<sup>&</sup>lt;sup>14</sup> INEGI; Resultados Definitivos, Chiapas XII Censo General de Población y Vivienda 2000.

Ecologicos de la Sierra Madre de Chiapas) a small cooperative of 335 members set at the base of Mexico's largest Biosphere Reserve in southern Chiapas. In 2007, Grounds for Health and CESMACH signed a three-year partnership agreement to improve cervical cancer prevention services in the coffee-growing regions of Chiapas. In keeping with the Grounds for Health model, the municipal government of Angel Albino Corzo and the municipal health authorities (the DIF) were invited to participate in the collaboration, helping them meet their goals and strengthen existing infrastructure for cervical cancer control.

As the program with CESMACH neared completion in 2010, Grounds for Health received an invitation to work with three other co-ops in the region. In 2011, Union Ramal Santa Cruz, Finca Triunfo Verde, and Comon Yaj Noptic signed onto the agreement in addition to the four municipal governments that presided over the communities where co-op members lived. Under the extended collaboration, it was understood that CESMACH would draw on its experience from 2007 to 2011 to "mentor" the other three co-ops in the community-based model for cervical cancer prevention. Building on lessons learned, Grounds for Health developed these new partnerships with a greater focus on co-op capacity building for local management of the program.

Together the four co-ops form the association, La Union el Triunfo, named for the protected biosphere reserve, el Triunfo located in the highlands of the Sierra Madre Mountains where most of the co-ops' coffee is cultivated. All co-op members are small-scale producers and are committed to organic practices and environmental sustainability. As certified Fair Trade organizations, the co-ops each receive a premium of approximately \$1,500 each year for projects to improve social and economic development in member communities.

Co-op communities are dispersed throughout the municipalities of Angel Albino Corzo, Monte Cristo, La Concordia, and Siltepec. Conditions range from small urban areas with access to both primary and secondary health services to extremely rural regions located several hours from basic health services. Many communities are cut off for weeks at a time during the rainy season due to impassable roads and have no running water, electricity, or public transportation. Often, radio is the sole means of communication with the outside world. Indigenous groups reside in many of the most isolated communities where social and cultural norms are a major barrier for screening.

Cooperative	Number of members	Number of communities
CESMACH	335	25
La Comon Yaj Noptic	141	12
Union Ramal Santa Cruz	537	32
Finca Triunfo Verde	220	11

### Co-op membership

\* Co-op membership changes year to year. The numbers below were provided by the co-ops in 2011

### Goals and Methodology

The initial collaboration between CESMACH, Grounds for Health, and municipal health authorities in Angel Albino Corzo stated as its purpose: *To increase knowledge of cervical cancer among* 

providers, and women and men in the general public, as well as support the existing infrastructure to improve cancer prevention.

The specific objective stated in the agreement was: *To provide access to early detection services to CESMACH's female members, and any other woman that requires these services and meets the criteria.* 

At this point, women were deemed eligible for screening services through the program if they were at least 25 years of age and had not had a prior Pap test, or had not received a Pap test in at least three years.

The role for each partner organization was explicit in the collaborative agreement. In short, Grounds for Health committed to:

- Training community health promoters to increase awareness about cervical cancer
- Training local doctors and nurses in low-resource appropriate methods for screening and treatment
- Organizing screen-and-treat campaigns in co-op communities (and staffing the campaigns with US medical volunteers)
- Providing the necessary equipment and supplies for the campaigns
- Maintaining a dialogue with state and municipal authorities on methods to improve cervical cancer screening services

CESMACH assumed responsibility for recruiting women for the campaigns, coordinating transportation for them to and from the campaign site, and providing overall logistical support for all activities related to the program.

The local health authorities assumed primary responsibility for selecting local providers to be trained by Grounds for Health, giving them permission to participate in the trainings and campaigns, and ensuring access to appropriate follow-up services for women at risk. The health authorities and the DIF/municipal government also jointly committed to making same day screen-and-treat services available in the municipal hospital, as well as in marginalized communities outside of urban Angel Albino Corzo.

The extended collaboration, which added the three other co-ops and corresponding municipal governments in 2011, maintained the same basic objective of bringing screen-and-treat services to co-op communities, but with the additional promise of establishing a cryotherapy treatment center in the region. Also of note, under this latter agreement, responsibility for community health promoter trainings was transferred to the co-ops, who also committed further to carrying out all community education activities.

At the start of the collaboration with each co-op, a co-op coordinator was designated as the organization's primary contact person for Grounds for Health. In all cases, the coordinators named were women, as the co-ops felt it most appropriate for female staff to be involved in a cervical cancer project. The coordinators designated from CESMACH, Triunfo Verde, and Comon Yaj Noptic all held positions as paid staff within the co-op. The co-op coordinator from Ramal was not a paid staff member, but was the wife of a co-op member and volunteered for the position. Regardless of their role within the co-op, all co-op coordinators were expected to carry out the tasks

associated with Grounds for Health on top of their regular duties and did not receive special compensation for their work with Grounds for Health.

Also in 2011, to support the expanded collaboration and strengthen the overall program, Grounds for Health hired a local doctor to work as the program coordinator for Grounds for Health in Chiapas. The program coordinator was paired with a program assistant, a nursing student from the US from February 2011 to August 2011, and an intern and pre-med student from the US from June 2012 to September 2012. In-country Grounds for Health staff worked closely with the co-op coordinators to support community outreach and education efforts, initiate supportive supervision visits to local doctors and nurses trained by Grounds for Health, and help the co-ops organize numerous mini screen-and-treat campaigns in far-reaching communities.

## Activities and Outcomes

**Community health promoter trainings** – In collaboration with co-op partners and municipal health authorities, Grounds for Health trained 138 community health promoters over the course of the five-year program. The initial trainings were conducted by Grounds for Health staff prior to campaigns but over time, the co-op coordinators assumed responsibility for the trainings, along with recruiting new community health promoters and supporting them in their role.

In the final year of the collaboration, the co-ops chose to focus outreach efforts on the most isolated communities, where few women had had the opportunity to get screened, or were still reluctant to do so. New promoters were strategically chosen by co-op leaders to address geographical and cultural barriers in communities with large unscreened populations. New promoters who came on board at this time included representatives from some of the region's most isolated communities, men, indigenous leaders, as well as women. The community health promoters proved essential in transmitting accurate information about cervical cancer prevention in a culturally appropriate way and in facilitating screening and follow-up visits for treatment.

**Clinical trainings for doctors and nurses** – Grounds for Health conducted seven trainings on cervical cancer prevention for local providers in Chiapas, including one in Comitan and six subsequent trainings in collaboration with the co-op partners. A total of 86 providers attended the trainings. The first two trainings, which took place in Comitan in 2006 and in Jaltenango in 2007, consisted of a half-day presentation to local providers on the updated WHO guidelines for cervical cancer prevention. It was not until the third clinical training in December 2007 that Grounds for Health adopted the Single Visit Approach and began training local providers in cervical cancer prevention using Visual Inspection with Acetic Acid and cryotherapy.

By 2009, Grounds for Health had developed a comprehensive curriculum consisting of two to three days of classroom instruction and a three to five day campaign for clinical practice. The training included pre- and post-tests as well as an evaluation of clinical skills. Participants who obtained a score of at least 70 percent on the post-test and passed the evaluation were awarded certificates of competency. Those that did not meet the criteria received certificates for participation only. From 2009 to 2012, 23 providers achieved competency in VIA, and 13 achieved competency in cryotherapy (see **Table B**.) Grounds for Health also designed refresher trainings, generally held six months after the initial training, which consisted of one day of classroom instruction followed by two to four days of clinical practice.

**Screen-and-Treat campaigns** – As the program refined its curriculum on cervical cancer prevention, the scope of campaigns became more targeted. Breast cancer screening was gradually eliminated from the campaign protocol in order to improve local providers ability hone their skills in VIA and cryotherapy (see **Lessons Learned**).

Between 2006 and 2011, 4,616 women were screened for early signs of cervical cancer through Grounds for Health's US-led campaigns and mini-campaigns led by in-country staff. A total of 352 (7.63 %) women were diagnosed with either a VIA positive lesion or high-grade changes on their Pap test, including 9 women (0.24%) with possible cervical cancer. Three hundred and five (305) of these women with positive screening tests met the criteria for same-day treatment, and 278 (91.15%) were treated using the Single Visit Approach. All women with positive screening tests who were not eligible for immediate treatment with cryotherapy were either referred or advised to return for a control test, as appropriate. A summary of campaign results is presented in **Table E**.

**Training of Trainers** – In March 2012, Grounds for Health conducted an early field test of a Training of Trainers (TOT), as part our initiative to develop and codify new tools for building the long-term capacity of community partners. A total of 18 participants attended the TOT, including 3 doctors, 3 nurses, 3 co-op coordinators, and 9 community health promoters. The training introduced participants to key concepts, such as the role of a trainer, learning styles, and public speaking. The session also gave participants the opportunity to practice planning and facilitating a short training using Grounds for Health clinical and community health promoter training materials.

**Planning for transition** – The 2011-2012 program year marked the fifth and final year of Grounds for Health's collaboration with co-op partners in Chiapas. During the final six months, the program focused on preparing co-op partners and local health care providers to assume responsibility for continuing the program. Grounds for Health provided technical assistance to each of the co-ops as they developed and implemented their own plans for expanding the community outreach component of the program and coordinated with local health officials to conduct mini-campaigns in co-op communities. At the close of the project, each co-op received a kit containing all the information needed to carry out a campaign, including where to obtain acetic acid, gas for cryotherapy, and other key materials.

**Proposal-writing workshop and disbursement of mini-grants** – In March 2012, Grounds for Health conducted a half-day proposal-writing workshop and invited co-op partners to submit a mini-proposal to Grounds for Health to support long-term plans for health projects involving cervical cancer prevention. As a result, three co-ops received mini-grants to expand community outreach and education programs and provide screening and treatment services in co-op communities.

**Radio campaign** – To combat misinformation about cervical cancer and encourage appropriate use of screening services, Grounds for Health developed a public service announcement based on five key messages in keeping with the World Health Organization's recommendations on cervical cancer prevention. The public service announcement ran several times a day for thirty days between August and September 2012.

# Impacts

In 2010, Grounds for Health began monitoring the number of women who received screening with VIA and treatment with cryotherapy by Grounds for Health-trained providers outside of campaigns. This indicator helped assess progress towards the ultimate goal of establishing sustainable cervical cancer screening and treatment services. Grounds for Health in-country staff collected this information through phone calls and visits to locally trained providers and from registry logs at the health facilities where they worked.

The findings revealed that during the final two years of the program, approximately 4,128 women were screened with VIA by Grounds for Health-trained providers during their regular clinical practice (outside of any campaigns organized by Grounds for Health or local partners). Furthermore, the data revealed a significant increase in the number of women screened from 2010 to 2011, indicating an increase in access to services as well as demand. Of the women screened by local providers, 261 (6%) had VIA positive lesions, and 3 (0.07%) had findings suspicious for cancer. At least 168 (64%) of these women received treatment with cryotherapy within three months. The data show an increase in the percent of women receiving treatment within three months from the 2010-2011 year to 2011-2012 program year.

Because cryotherapy was not available at all health posts, many women with VIA positive results were referred to another clinic for cryotherapy. Community health promoters and co-op coordinators played an important role in ensuring women received treatment. Although Grounds for Health was not able to follow individual women screened by local providers outside of campaigns, the vast majority are believed to have received treatment.

By the end of the collaboration in September 2012, sixteen (16) Grounds for Health-trained local providers were continuing to screen and treat women in coffee-growing communities and were working actively with community health promoters.

Women Screened and Treated by Local Providers	2010-2011	2011-2012	Total
Women screened with VIA by GFH providers outside of campaigns	1221	2,907	4,128
Women who accessed services outside of campaigns that were within target group	1127	2,764	3,891
	(92%)	(95%)	(94%)
Discrete women with VIA+ result (does not include suspicious for cancer)	75	186	261
	(6%)	(6%)	(6%)
Women with result suspicious for cancer	2	1	3
	(0.16%)	(0.03%)	(0.07%)
Women with VIA positive lesion appropriate for cryo who received treatment with cryotherapy within three months	31	137	168
	(41%)	(74%)	(64%)
Women with VIA positive lesion appropriate for cryo who received referral or appointment for cryotherapy	44	37	81
Women referred for further diagnostics or treatment (ex: suspicious for cancer, lesion too large)	2	4	6

 Table A: Women Screened and Treated by Local Providers in Chiapas (2010-2012)

\*Does not include all women who were advised to return for repeat testing or whose treatment was deferred for various reasons.

In addition to the ongoing services offered by the local health care providers trained by Grounds for Health, the co-op partners and the local DIFs had acquired the knowledge and tools necessary to bring high-quality cervical cancer prevention services to rural communities. As summarized by Grounds for Health coordinator, Dra. Lupita:

Each co-op now has a team that knows how to continue this program moving forward, each [co-op] coordinator knows how to organize a campaign with the support of promoters and co-op leaders, they know who their strongest promoters are and the communities where promoters need help. They have the materials and human resources to continue [this program], but most importantly, they understand the importance of this work - cultivating health - because they have seen the satisfaction expressed by women who have received care.

The local partners have since proven their ability and commitment to use the knowledge gained through their collaboration with Grounds for Health. Since assuming responsibility for the program, three of the four co-ops in Chiapas have gone on to organize screening and treatment services in collaboration with the local DIFs and have taken on an active role in facilitating follow-up care for women who need it.

Nearly one year after the program in Chiapas has transitioned over to local ownership, there is strong evidence that the program will continue. Triunfo Verde has initiated a long-term health program, "*Comercio Justo, Vidas Sanos*" (Fair Trade, Health Lives) that includes regular cervical cancer screen-and-treat campaigns in addition to broader general health interventions in communities with no existing services. CESMACH and Comon Yaj Noptic are also continuing to organize screen-and-treat campaigns in collaboration with municipal health authorities. Additional evidence of the sustainability of the program is discussed in detail under **Qualitative Impacts**.

# **Results for All Sites**

# **Quantitative Outputs and Outcomes**

Although Grounds for Health's model changed overtime, the overarching goal has remained focused on preventing cervical cancer in coffee-growing communities through improving access to early effective detection and treatment services at the community level. At every site, program activities included training clinicians and community health promoters, equipping clinics or making direct investments, and providing direct services through campaigns organized by Grounds for Health. The results of these core activities are summarized in the tables below.

Program Site	# of clinical trainings	Providers who attended at least one training	# who achieved competency in VIA **	# who achieved competency in Cryo**
Oaxaca *	7	40	-	-
Veracruz *	8	46	-	-
Chiapas	7	86	23	13

### Table B: Summary of Clinical Trainings

\* Six of the trainings in Oaxaca and seven in Veracruz consisted of supervised clinical practice only and did not have didactic component.

\*\* All of the participants trained in Oaxaca and Veracruz, and 37 of the participants from Chiapas were trained prior to the introduction of competency assessments on VIA and cryotherapy.

Program Site	# of CHP trainings	# participants total
Oaxaca	3	33
Veracruz	2	41
Chiapas	11	138
Totals	15	212

### Table C: Summary of Community Health Promoter Trainings

Although Grounds for Health conducted community health promoter trainings at all sites, indicators for this component of the program were not standardized from site to site in the early years. The number of trainings and participants from Oaxaca and Veracruz shown in the table above are taken from program reports. It is likely that not all trainings were documented in reports and that the actual numbers exceed what is shown in the table.

### Table D: Equipment Donations and Other Direct Investments

Type of Donation	Oaxaca	Veracruz	Chiapas	Total
Dysplasia clinics equipped to diagnose and treat pre-cancerous lesions (with colposcopy and LEEP, or cryotherapy)	1	1	4	6
Major clinic rehabilitations (construction projects)			1	1
Other Direct Investments			3 mini-grants to co-ops	
Total approximate value of all equipment donations and direct investments (rounded): \$40,000				

### Table E: Women Screened through Campaigns Coordinated by Grounds for Health

Screening and Treatment uptake from Campaigns (by site)*	Oaxaca (1996-2005)	Veracruz (2000-2008)	Chiapas (2006-2012)	Total
Women screened during GFH campaigns (coordinated by GFH US staff or GFH in-country staff)	3,889	6,176	4,616	14,681
Discrete women with abnormal result (VIA+/CIN2 or greater, or suspicious for cancer)*	79 (2.03%)	97 (1.57%)	352* (7.63%)	528 (3.60%)
Women with result suspicious for cancer	15 (0.39%)	11 (0.19%)	9 (0.24%)	35 (0.24%)
Women with abnormal result who met treatment criteria**	_**	7**	305/352** (93.44%)	-
Women with abnormal result and eligible for cryo who received treatment during the campaign*	_**	7/7 (100%)	278/305** (91.15%)	-

For comparison purposes, the percentage of women with CIN 2 or greater in the US population is approximately 1.10% and results suspicious for cancer are diagnosed in approximately .10% of the population.

\* Because VIA is a more sensitive screening test than the Pap smear, the percentage of women with abnormal results increased when Grounds for Health introduced VIA into the campaign protocol in 2007.

\*\*Because cryotherapy was not made available during campaigns until 2008, treatment indicators were not used for earlier campaigns. Data does not reflect the women with abnormal findings whose treatment was deferred for various reasons (menstruation, pregnancy, cervicitis, etc.) or who were referred for further diagnosis and treatment at the next level.

# **Qualitative Outcomes**

To assess the less tangible changes resulting from the collaboration, we conducted semi-structured interviews with community women, providers whom had been trained by Grounds for Health, coop staff, and community health promoters. Interviews in Oaxaca and Veracruz were conducted in 2010 after the collaboration with Grounds for Health had ended. In Chiapas, interviews were conducted in 2011, in 2012 during the transition to local ownership, and in early 2013, when local partners were in the early phases of assuming responsibility for continuation of the program. For some of the interviews in Chiapas, we used the Most Significant Change methodology. A description of the methodology and selected information from conversations, meetings, emails, and other communication between Grounds for Health staff and local partners. Common themes and examples of supporting evidence are summarized below.

# Increase in knowledge about cervical cancer has led to greater acceptance of screening and treatment services.

• Community members became more accepting of cervical cancer screening and treatment services once they understood they were at risk, were assured of receiving the results of their screening test, understood that a positive screening result was not a death sentence, and knew that the treatment was simple and inexpensive.

# Communities have been empowered to address cultural barriers around machismo and women's ownership of their health.

• The co-ops' support of community health promoters empowered them to address cultural barriers by discussing topics that were formerly taboo, such as machismo, the importance of women's health for the individual and the family, and the role of men and women in making health decisions.

# New relationships were formed between rural community groups (co-ops) and health entities (governmental, private, public, NGO, etc).

- Co-ops at all sites have continued to collaborate with municipal health authorities, such as the local DIF, or public hospital, to guarantee screening and treatment for co-op members.
- Two co-ops in Chiapas are collaborating with Partners in Health, another international nongovernmental organization, to organize additional clinical trainings and expand screen-andtreat services to new areas.

### Addressing one health problem provided the initiative to address other health problems.

• Co-ops at all sites have subsequently carried out activities to address a broad range of health issues in the communities such as diabetes screening, flu vaccinations, nutritional education

workshops, and some have procured medicine and contracted providers to offer general health consultations to their members.

• Many community health promoters who coordinated screening and treatment services with local providers also facilitated access to broader health services for community members. As described by Dr. Lupita Jovel in her MSC interview (see **Appendix**), promoters took responsibility for ensuring all women in the community had access to basic health services. In one example, if a promoter found a woman in the community who was pregnant and needed pre-natal care, she made sure that woman received care. In this way, community health promoters served as essential links between communities and the available health services.

### Commitment to provide health services expanded and changed as a result of the program.

- At least two co-ops in Chiapas have moved from providing occasional loans to members with urgent medical needs to providing financial support that does not need to be paid back for members needing follow-up treatment for cervical cancer or pre-cancer.
- CESMACH and Triunfo Verde have taken an active role in scheduling and coordinating all follow-up treatment for women with cervical cancer, including transporting them to care and providing support for the family.
- Comon Yaj Noptic converted their tasting room at their headquarters in the remote town of Nuevo Paraiso into a small clinic in 2011. Since then, they have been working with a number of local providers to offer a range of services. For much of the 2011-2012 year, three different Grounds for Health-trained providers staffed the clinic on alternating Fridays, offering screening with VIA in addition to general consults for community members.

# Co-ops have included health services in their organizational work plans, budgets, or strategic plans.

- At least three co-ops added a specific health services component to their organizational strategic plans or developed work plans for long-term health projects or specific activities after collaborating with Grounds for Health (of the others, some already had a health component). Each of these organizations has budgeted for related expenses in their annual work plans.
- Comon Yaj Noptic has created a new paid position within the co-op for social projects and has made cervical cancer a cornerstone of their community development program.

### Health is seen an investment as important as other investments in the business.

- Leadership from multiple co-ops stated that health care is essential to the well-being and financial success of the whole co-op.
- At least four co-ops have invested a percentage of proceeds from their Fair Trade premiums into a fund that provides money to co-op members with health care expenses.

# Women gained recognition as community leaders as a result of serving as community health promoters.

- Once trained as community health promoters, many women came to be recognized as leaders in their community. In some cases, these women were elected as delegates to represent their community's interest in the co-op.
- Numerous local stakeholders in Chiapas emphasized the importance of community health promoters to the success of the model. They cited promoters' ability to reach women who were not aware of their risk, their help with accessing services, their relationships with local health care providers, and their accompaniment of women who had to navigate confusing follow-up processes. The promoters were referred to as the "estrellas de esta pelicula" or the stars of this movie.

# Clinical training led to improvements in quality of women's health care and increased patient and provider satisfaction.

- Once Grounds for Health adopted VIA, it became the preferred screening test among women and providers alike because unlike the Pap test, VIA produced an immediate result and the women departed "satisfied" knowing their results.
- Local providers indicated that Grounds for Health's clinical training influenced them to change their clinical practice to provide "woman-centered care". Many providers specifically mentioned that they had learned how to perform a pelvic exam in a way that does not cause pain and is respectful to the patient, and how to provide effective counseling using simple language.
- Numerous providers reported that the Grounds for Health training was the first time that they learned how to actually locate the cervix and take a Pap smear correctly (in their medical and nursing schools, providers had not been taught the correct technique for taking a Pap sample). As a result of the Grounds for Health training, providers throughout Oaxaca, Veracruz and Chiapas are performing the test correctly, "without blindfolds."

# **Lessons Learned and Best Practices**

Grounds for Health has used the lessons learned from its experience working in Mexico to develop a successful program model. What started as a small humanitarian effort focused on one community, slowly grew to a model of community-based development. The lessons that have guided the development of this model are summarized below.

# 10 Lessons Learned

- 1. Cervical cancer prevention programs are possible to establish, even in remote, rural communities.
- 2. Cytology based programs (Pap smears) are not a sustainable option, even with significant support.
- 3. Screening methods must match local capacity and resources.
- 4. Community provides the base for addressing barriers to access for rural women who are less likely to seek screening services and are more likely to be lost to follow-up between screening and treatment.
- 5. The problem of loss to follow-up, which can reach 75% of women [who require treatment for precancers and cancers] in low-resource areas, can be successfully addressed by engaging community— community cares deeply about its members and the personal connectivity of a community can be mobilized to provide the support, outreach and resources a woman needs to access life-saving services.
- 6. The development of broad-based partnerships that bring all members, community, health authorities, NGOs and health care providers to the table as partners has the potential to create strong, sustainable, prevention programs.
- 7. Community health promoters are a vital resource that can successfully provide community education, recruit women at risk, and serve as the critical link between women and services.
- 8. Both nurses and doctors can successfully perform VIA and cryotherapy, which are more effective than the Pap test in low-resource settings.
- 9. Private industry can be motivated to provide financial and in-kind support of social programs.
- 10. When you are successful, everybody wins.

# **Best Practices**

From these broad lessons learned, Grounds for Health has identified and implemented best practices to strengthen the core components of its program model: clinical trainings, community engagement, and building strong local partnerships. **Clinical training** ensures that local providers have the skills necessary to prevent cervical cancer through screening and treatment; **community** 

**engagement** ensures that these services reach the population in need and that they are accepted by the community; and **building strong local partnerships** ensures that essential knowledge and the tools stay within the community where services are needed.

## **CLINICAL TRAINING**

**Conduct focused clinical trainings** – While Grounds for Health subscribes to the concept and practice of integrated health care—which allows patients to access an array of services at a primary health clinic—experience has demonstrated that the most effective way to train providers in new skills is through a highly focused clinical training. For a few years, Grounds for Health integrated cervical cancer screening services with other services (such as breast cancer screening and family planning consults) during campaigns. However, after deciding to train local providers in VIA and cryotherapy, Grounds for Health found that providers needed to practice these skills repeatedly in order to achieve competency. Offering breast cancer screening and family planning consults during campaigns required providers to spend more time with each patient, resulting in fewer opportunities to practice skills in VIA and cryotherapy under supervision. For this reason during clinical trainings, Grounds for Health now focuses exclusively on VIA and cryotherapy. Once providers complete the training, they are encouraged to integrate their new skills into their regular practice and to offer each woman any services that are appropriate according to her life cycle.

**Provide vision tests and glasses to providers who need them** – As the name implies, Visual Inspection with Acetic Acid is done simply by washing the cervix with acetic acid and then looking with the naked eye for the characteristics or "white spots" that denote cellular changes. Studies have shown that the test can be performed effectively by nurses at the primary case level. After observing several capable providers struggling to see the necessary level of detail on the cervix, Grounds for Health discovered that many of these providers required glasses. The problem was remedied with a simple vision test and by providing reading glasses of the appropriate strength to the providers who needed them. Vision tests have since become standard practice in all Grounds for Health trainings.

## COMMUNITY ENGAGEMENT

Use community health promoters to link women with providers – Among the providers trained by Grounds for Health in Mexico, those who continued offering screening and treatment services in co-op communities were able to do so largely because of the effectiveness of the community health promoters involved in the program. "Son las estrellas de esta película" ("they are the stars of the show") one provider explained. Without community health promoters, women would not come for screening. Today, Grounds for Health uses community health promoters to link community members with local providers, in effect creating a lasting bridge between the community and the local health services.

Leverage community connections to reduce loss to follow-up – In partnering with coffee cooperatives, Grounds for Health discovered that the program could leverage the relationships and responsibility that community members feel for one another to ensure that women received the care they needed. In very low resource and remote areas, few women can afford to travel to urban centers for treatment. In the Grounds for Health model, the co-op takes responsibility for these women and facilitates access to care. This approach effectively addresses one of the greatest challenges to effective cervical cancer prevention in low-resource areas through reducing loss to follow-up.

**Using community health promoters to address cultural barriers** – The largest unscreened populations in Mexico remain in isolated indigenous communities where misinformation is

exceptionally high and distrust of local health services is widespread. By inviting trusted community members to serve as community health promoters and equipping them with basic information and tools, Grounds for Health was able to gain the trust of community members and address cultural barriers at the community level. Of particular importance is the inclusion of males and females as well as indigenous leaders, repeat visits to the communities, and one-on-one discussions that directly address the woman's fears.

**Craft messages to encourage appropriate use of services** – Once cultural barriers to screening were overcome, interest in screening increased to the point that it became difficult to communicate the message that certain women do not need screening. In keeping with global recommendations to aim for higher coverage of the population, Grounds for Health seeks to limit screening to women between 30 and 50 years of age and to those who do not have a screening test result from the past 3-5 years. To maximize the impact of the screening and treatment programs, community outreach messages must be carefully crafted to encourage women in the appropriate risk group to go for screening, while also discouraging younger women and women recently screened from coming unnecessarily.

### STRONG LOCAL PARTNERSHIPS

Anticipate leadership transitions – The organizational structure of Grounds for Health's community partners in Mexico, and elsewhere, consists of elected officials serving finite terms. Though the system is essential for good governance, in some cases, the transition to new leadership can interrupt or stall progress on special projects. To address this challenge and ensure ongoing support from new leadership, Grounds for Health and its collaborators deployed community health promoters to increase community participation and demand for screening and treatment services, and met with incoming co-op and municipal leaders to present the program and gain immediate buy-in. Seeing clear community support, evidenced by active community health promoters and women seeking screening services, the incoming leaders tended to commit to furthering the program.

**Influence local norms for cervical cancer prevention and control** – Despite having forged alliances with a number of health authorities in Chiapas, Veracruz, and Oaxaca, the Mexican national norms for cervical cancer prevention and control remain largely ineffective in rural settings. After adopting the Single Visit Approach, Grounds for Health's training succeeded in "winning over" individual providers on the advantages of VIA and cryotherapy, but was unable to influence changes in the national screening and treatment norms. In order to gain support for changing national norms, Grounds for Health has developed a comprehensive global advocacy strategy, and engages senior health authorities at the national and local levels to ensure the local providers are given permission to practice the new norms.

**Management capacity building for co-op partners** – Working with community partners whose key mission is unrelated to cervical cancer or health issues presents obvious challenges. While an easier approach may have simply been to provide services in co-op communities, giving the co-ops responsibility for components of the program early on—from initial community education and mobilization to organizing follow-up visits to ultimately coordinating their own campaigns—gave them practical skills they can use moving forward. They learned how to conduct an assessment of basic health services, navigate the health system, and advocate for better health care in their communities. Ultimately, this contributed to the co-ops decisions to develop much broader health programs.

# Conclusion

The value of community ownership as an integral part of a health initiative in rural Mexico cannot be overstated. In many countries—in Mexico in particular—rural communities are highly marginalized. Even where health services exist, they have a reputation for being inadequate or of low quality. Many communities harbor a strong distrust towards these services.

The early commitment on the part of the Aztec Cooperative Union and the local doctors at the hospital in Pochutla demonstrated the necessity of community ownership. For each trip, the co-op mobilized the community around the campaigns, promoting cervical cancer screening, and coordinating transportation and childcare so the women could attend. They also recruited their own volunteers—who would later become community health promoters—to inform men and women in the community about the screening, identify women within the appropriate age group, and accompany the women to the clinic. This early example of the co-op taking the lead in community education, outreach and mobilization became the basis for the Grounds for Health model.

Today, Grounds for Health is joined by numerous other organizations working to address the enormous disparity in access to effective cervical cancer prevention services in developing countries. While many of these organizations have adopted VIA and cryotherapy, Grounds for Health's model is distinguishable from that of other organizations in three significant ways:

- 1. Grounds for Health promotes the most *effective and efficient* techniques for cervical cancer prevention that are available today.
- 2. Grounds for Health works in areas with the *highest burden* of cervical cancer: rural, low-resource areas with limited access to health services.
- 3. Grounds for Health partners with local community organizations coffee cooperatives and the health care organizations so that the *community has ownership of the program* and is empowered to advocate for and address their own health care needs.

Though we have moved on to other countries and other communities, the lessons learned working with our partners and communities in Mexico will remain our muse. As we work toward the goal of universal access to cervical cancer screening, and with it the demise of cervical cancer as a major killer of women, we will always keep in mind the women who inspired us, the women at the end of the road.

# Appendix A: Selected Most Significant Change Stories from Chiapas

As part of the qualitative assessment of the program in Chiapas, Grounds for Health used the Most Significant Change (MSC) methodology - a proven qualitative methodology for evaluating changes related to social programs.<sup>15</sup> The heart of MSC entails asking participants the question, "Looking back over the history of the program, what is the most significant change resulting from this project in your community and for you personally?" Grounds for Health staff and interns collected MSC

<sup>&</sup>lt;sup>15</sup> Davies, R. and Dart, J. (2005). *The 'Most Significant Change' (MSC) Technique: A guide to its use*. Available from www.mande.co.uk/docs/MSCGuide.pdf.

stories during campaigns, assessment activities leading up to the end of the end of the project in Chiapas. In keeping with the concept of "purposive sampling," participants were invited to an interview based on their role in the project and prior conversations involving anecdotal stories about their experience, as well as when an opportunity for an interview presented itself in the community. Interviewers sought to capture a variety of voices, including co-op coordinators, co-op presidents or board members, senior health authorities, community health promoters, local providers and community members.

Once stories were collected, Grounds for Health implemented a four-step process for selecting the final stories:

- 1. One staff member was charged with reviewing all the interview material and transcribing and translating the stories. Only incomplete or very weak stories were omitted at this stage. Nineteen stories were completed in written form prior to final selection.
- 2. All US staff were tasked with reading the completed stories and assigning each story a "significance score" of 1, 2 or 3. (1 being least significant and 3 being most significant.) Staff members were also asked to briefly note why they scored each story what they did.
- 3. A meeting was convened with all staff at headquarters to select the final stories. Everyone was asked to share the score he/she assigned to each story and reasons why. Cumulative scores were calculated for each story from the individual scores assigned by each staff. The stories with the highest scores were reviewed and discussed. Final selections were chosen by consensus with consideration paid to the following factors: overall significance score, representation by country, representation of roles, and interesting or unexpected topics.
- 4. Final selections were presented to the Executive Director for agreement.

### Story 1: "Now I have skills to help other women"

**Project:** Cervical cancer prevention **Role of Storyteller:** Community Health Promoter - Teresa Neva Sanchez **Date of Recording:** March 2012 **Location:** Olvido Cerro Bola, La Concordia, Chiapas, Mexico

### Tell us about your work as a community health promoter.

Since my mother died of cancer, my dream has always been to help other women. My role is to talk with women about illness. I've been working with this project as a health promoter for two years. I attended a course to become a health promoter. Before that course, I didn't know what a health promoter was. We learned about this kind of cancer and how to talk to women. My three kids are grown and my husband, who is a member of the coffee cooperative, allows me to do this work. For this reason, I have time to visit the communities and work on this project.

Every few days I go into the community to talk with my neighbors. I knock on their door and tell them that I am with *Cultivando la Salud* [Grounds for Health]. I share the information about cervical cancer in my *rotafolio* [flip book]. I explain that the screening for cervical cancer does not hurt. I also explain that this kind of cancer is often silent and at first doesn't have symptoms. I tell them that their children need them to care for themselves by being tested. There are two communities where we also conduct *charlas* [group talks] about the program.

Some women agree to be screened and others decline. Often I encounter women who are indigenous and do not speak Spanish. To talk with them, we seek out someone who can translate. One woman at first told me that she didn't want to be tested. Then at some point later I saw her again in the community and we talked again about the testing. Finally she agreed to be tested, and I accompanied her to the clinic here at the cooperative *La Comon Yaj Nop Tic*. Her screening test was positive and she needed treatment. I helped make sure that she received her treatment nearby during the campaign in December 2011 hosted by the cooperative *Ramal Santa Cruz*.

### What accomplishments are you most proud of?

It has always been my dream to help other women. I now have my certification as a community health promoter and with this project I am doing something that helps other women.

### What changes would you like to see in the community?

I wish to continue to support this project to help women. Many women are poorly treated by their husbands. It is my dream to see this change and see husbands become supportive.

# What is the most significant change that you have seen in the community as a result of this project?

More women are receiving testing to prevent cervical cancer. They want to be tested.

# What has been the most significant change that you have experienced as a result of your participation in this project?

Before this project, I didn't leave my house or rancho. Now I feel differently. I have new knowledge. My participation with Grounds for Health has been about caring for myself.

### Story 3: "The people now have more knowledge and correct information."

Project: Cervical cancer prevention
Role of storyteller: Community Health Promoter and member of Finca Triunfo Verde (#7)
Magdalena Ortega Roger
Date of Recording: March 2012
Location: Nueva Palestina, Jaltenango, Chiapas, Mexico

### Tell me about the first time you heard about cervical cancer.

My sister in law was told that she had the HPV virus. I looked it up in the dictionary and what I understood was that it was cancer. I was very afraid. Around 7 years ago in the clinic they did a talk about HPV and cancer. Then about 5 years ago, through the cooperative I got involved in this project.

### Have you ever been tested for cervical cancer?

In May of 2011, I went to see the nurse Tony in the local clinic. I knew that it was important for my children that I do for testing. I need to live longer—for my children. It was Tony who found the lesions on my cervix. Before that, I had also been tested each year. But the results had always been normal before.

### Are there barriers that make it difficult for women to be tested?

Yes. They don't have money. But through the cooperative, these services are free and they even provide a snack for the women. Sometimes husbands don't want their wives to be screened. They are afraid because they don't understand cancer. In order to overcome this, it is important to talk with the men, to include them. It isn't only women who need the information, but also men. They are also part of the family.

### Have other women from your community been tested for cervical cancer?

There have been five special screening opportunities for women from my community. At first, we went on our own and then it was later that the cooperative Triunfo Verde became involved. All of the women received their results and were satisfied with their experience. Each woman with an abnormal result received treatment. They were able to receive treatment on the same day. I think that it is good that the cooperative is involved in this project. They see that there is quite a bit of need and they will continue to work to help. I feel supported by the cooperative's coordinator of this project and also by the cooperative.

### What are the benefits have you have seen in the community as a result of this project?

One big change is that in the health clinic locally, we never received the results of our testing. But in the campaigns with the cooperative, women always are informed of their results - if they are good or bad. The people now have more knowledge and correct information. There are some who still don't have the correct information. When I hear information that isn't correct, I correct them. Before this project, we didn't think that cervical cancer was something that could be prevented or cured. Now we know that if we can prevent cervical cancer if we detect it early.

### Story 6: "The quality of attention"

**Project:** Cervical cancer prevention **Role of Storyteller:** In country program coordinator - Dra. Lupita Jovel **Date of Recording:** December 2011 **Location:** Jaltenango, Chiapas, Mexico

### What has your role been in this project?

My participation began five years ago with the first campaign. After that I began to support in the campaigns. Then four years ago I took the initiative to begin screening (with VIA and doing cryotherapy) in the DIF clinic. The hospital and DIF made an agreement that if DIF provided the equipment and supplies, the hospital would lend me on Tuesdays to provide the services for women and DIF would get credit for the productivity. So between the campaigns, all of the work I did with Grounds for Health was really with DIF. DIF recruited the women and handled all of the necessary follow up and referrals. At the beginning with DIF, I didn't work with promoters. I didn't really know their purpose.

In January of 2011, I joined Grounds for Health's staff as the local coordinator. As a result I've become involved in supporting the co-op coordinators and promoters. Before, I just provided screening services. Now I've been learning the work from the bottom up—starting with the promoters and co-op coordinators, then advocating for the program with the co-op leadership and finally, overall coordination of work among all the local stakeholders.

# What have been the biggest or most important changes that you've experienced in your participation in the project?

It has been learning about the real work of the promoters. In my view, they are like the social workers in the communities. Also, learning about the role of the co-op coordinators, who are the most important support for the women with positive results, and ensuring the involvement of the cooperatives—as it is really a program for women in coffee communities. The change is huge, as we've been working to solidify the team and to grow our team. In the past the promoters just participated during the campaigns and then disappeared.

Now we're working as a more solid group. And the change is tremendous. Each woman, each promoter feels like they are part of Grounds for Health and works because they believe in the program. They take the initiative to do things, as part of Grounds for Health. It is excellent. What we've tried to do is motivate people to become part of the project. The promoters, the co-op members, and the leadership ... have put on the shirt of Grounds for Health. They have developed a love of the program. It has really been lovely to experience what happens when people take a program on as their own.

#### Can you describe an example of someone taking this kind of initiative?

We might train a promoter in a community and explain to her that she needs to recruit women for the campaign. And we teach her about the importance of her role in the community—to prevent deaths, to care for women, to find them, to talk to them. The women take this on as their own, and not just for cervical cancer. If they encounter other health issues, such as a pregnant woman, they feel it is their role to make sure that that woman also receives the [prenatal] care that she needs. They will bring her to care. The promoters feel responsible for everything that has to do with cancer and anything that is related to women's health. They are conscious about this. And they are always checking up on those women. The effect of this is that the promoters are important to the community. They also feel that they are important. They've taken on this role and the community sees their importance. The community also trusts and believes in the promoters. They are very good people in the community. They are the connectors for us.

#### What are the changes that have occurred in the community as a result of the project?

Tremendous changes. In the past, we knew that women were afraid to have screening tests. This is because if she was to test positive, she knew that she'd just die of cancer, that was all. Because she didn't have money for treatment, which is very expensive. Also, no one supported her, often not even her husband. She felt all alone with her problem. So the women said, "if they find that I have cancer, I will die of cancer."

But now it is different. The woman knows that if she goes for screening, there is a big team that is behind her, supporting her. She won't be alone, even if her husband isn't supportive. The cooperative, the promoter, all of us are behind her. Women feel this. Before, if she was found to be positive—her husband had to sell their coffee, horse, cows in order to get care for his wife. Now with this program it is different. If a woman has a positive result, the promoter and health system find a way for her to get care. The woman has support and doesn't need to sacrifice family resources to get care. Now the woman has a different focus and she is less afraid. If they find something, she knows that she will get help, and the care she needs. The change is tremendous. Before she was afraid that they would find cancer and she would die. Not anymore.

#### What problems have you experienced?

At times the health providers in the clinics don't have the supplies that they need. At the DIF clinics there are strong ones and weak ones. Two of [the clinic directors] don't want to make even one cent

of investment in the program, even for cotton or soap. With respect to IMSS, they have many preventive programs in place which then leaves them with little time for this program. They do it, but at times a bit fast and they lose a bit of quality as a result. In the SSA, the biggest challenge is the norms. They are closed-minded to the program. They aren't interested because they have other priorities. Some of that is political.

Another barrier is distance ... the large distances to visit a colleague. It can be very difficult because the majority of IMSS providers live in the mountains and it can be 3-4 hours to reach them. Rough roads, and during the rainy season, there is no access; the roads are blocked. The ideal for the program would be to be doing continual monitoring of the trainees. But that isn't always possible due to the communication and transport. In terms of the cooperatives, it would require investing more time—the coordinators would need to have more time for the program. Sometimes they have so much work that they can't attend the meetings or complete the projects. And at times everything gets done with haste. So to invest more time would be good.

#### Anything else that you'd like to share about the impact of the program?

In my view, it is magnificent. As a health care provider it has been a tremendous change to work without blindfolds on my eyes while providing care for women.\* The most important part—what made me fall in love with Grounds for Health—was the quality of attention. The human quality. When we worked together in a campaign, we learned to treat women differently. I was captivated by the passion that the American volunteers exhibited in their care of women. This stood out as a contrast to [how providers here work]. We were just focused on numbers of patients and work to see as many women as we can. For me, what I have learned most and what I've liked most about this work has been the *humanidad* [humanity].

And another important aspect of Grounds for Health that has been vital for me has been teamwork. We have promoters and co-op coordinators who are all part of the team. As a doctor, you can perform a screening and then lose a woman to follow-up and never know what happened to her. But by being connected or intertwined, it means that you have a complete preventive health program for public health. It is the ideal.

\* Of note, Lupita has talked a lot about not really knowing anything about the cervical anatomy until being trained by Grounds for Health. She often talks about previously have done Pap exams "blind", as she had never been trained to actually look at the cervix when doing a screening.