CDC Botswana Sharing Another Partnership Success

An Effective Weapon to Fight Cervical Cancer in Botswana: "See and Treat"

Bontleng Clinic in Gaborone, Botswana—Tebogo* runs a small tuck shop outside a cervical cancer screening clinic in Gaborone. A year ago, she was curious about what happened in the clinic and would ask a few women passing by, "What do they do in there?" When she heard about the cervical cancer screening, she said, "It didn't really mean anything to me." But then, one day a nurse from the clinic went out to the tuck shop and started telling Tebogo what cervical cancer screening

means. "When she explained things to me, I decided to go have a checkup. I was surprised to find out I had these seeds on my cervix. But, I wasn't worried because I knew they were not cancer. And, I could be treated." That little white 'seed' Tebogo referred to were the precancerous cells found during her screening through a remarkably quick and inexpensive procedure that involved one simple ingredient: household vinegar. Tebogo was treated and now, a year later, she remains cancer-free. The pilot program Tebogo received services from offers the "See and Treat" approach to cervical cancer, and it is changing the way women's health care is delivered in Botswana, attracting an influx of additional funding that will pave the way to saving more women's lives.

Cervical cancer is the leading cause of cancer-related deaths for women in Botswana. Though Pap smear screening has been offered for the last 20 years, unfortunately the screening will have no impact on the disease if women who have screened positive are not offered treatment, and this leaves health service providers frustrated. But now, there is a feasible, acceptable, and efficient approach forging a new path in Botswana, this "See and Treat" approach.

Sometimes the most effective health care is also the simplest and most cost-effective.

household vinegar



Nurses Metlha Nchunga and Gracious Ditlhabang staff the Bontleng Clinic where the "See and Treat" approach was piloted.

Sometimes the most effective health care is also the simplest and most cost-effective. By bypassing the time-consuming and costly Pap smear screening and going straight to a single visit approach involving screening, diagnosis, and treatment, a piloted project is providing care at local clinics to diagnoses and treat women during the very same visit—*if pre-cancerous cells are detected via that vinegar swipe*. If the case is more severe and cancerous lesions found, the woman undergoes the loop electrosurgical excision procedure (LEEP) at Princess Marina Hospital.

Customer-Focused Approach

One would have to look very hard to find any other place in the health care system—even within the private health sector—with such a customer-

focused approach.

Sethunya*, a professional woman in her mid-forties at the Bontleng Clinic, said, "I didn't know that in a clinic

like this you can get everything done. I didn't expect this. I came in thinking I'd get an appointment, but to my surprise, I had an exam and this freezing procedure which the nurses did all in this one visit. They're doing a really good job for us, especially the people living with HIV/AIDS. I'm going to encourage my friends to come." The "freezing" procedure Sethunya refers to is cryotherapy, the technique a nurse administers to freeze a lesion off the cervix. It's highly effective with minimal risk. Since this program's inception in 2009, the clinic has seen over 1,000 new patients each year and very few—maybe 10 a year—are lost to follow up.



Health providers use a digital camera that is able to take a magnified picture of the cervix.



When a patient comes to the Bontleng Clinic for a checkup or to obtain their antiretroviral drugs, nurses come into the waiting room to educate and recruit patients for cervical cancer screening. They use the metaphor of a seed to explain precancerous cells. Nurse Metlha Nchunga who has been with the program since its inception in 2009 describes, "We explain that we examine the patient to see if there is the 'seed' of infection, the 'seed' of cancer on their cervix. We tell them that we want to remove that seed before it forms roots and branches—before it becomes cancerous. This is a preventative method and the women come. They are interested."

Nurses Nchunga and Ditlhabang have both been with the pilot program since the beginning and their enthusiasm is contagious. "Our women are benefiting," says Nurse Ditlhabang who is seconded from the Ministry of Health to the Bontleng Clinic, a clinic sponsored by CDC Botswana through PEPFAR funding and implemented through the Ministry of Health and the Botswana-UPENN Partnership. She continues, "This is unique. We really want to see the services expanded because we see the value. Right now, really only city people have access, but it's the women in the rural areas who need access."

Low-Tech, High Quality

Nurses like Mma Nchunga and Mma Ditlhabang, having practiced this process since 2009, are now considered masters at it. At the clinic, examination is relatively low-tech and quick. First the nurse swabs the patient's cervix with vinegar. Vinegar

Added Value

There are only three specialist Gynecologists in Botswana's public hospital system. The digital photographs have the added value of encouraging telemedicine. Nurses email the digital photos to Dr. Masire. In that way, costs are decreased and time is better managed as neither the patient nor the doctor must travel for a second opinion.

highlights precancerous cells or lesions, turning them white. With a digital camera, the nurse snaps a magnified picture of the woman's cervix. The picture is shared with the patient and the patient becomes an empowered agent in the decisions surrounding her health. As Dr. Masire, Country Director of the Botswana-UPENN Partnership and acting physician in the cancer center states, "We show the woman the picture and say, 'This is your cervix. Here is the abnormality and we can freeze it today, immediately, getting rid of that seed that could cause cancer.' The women overwhelmingly agree to treatment." If the exam and picture reveal a more significant problem, then the woman is sent from the clinic to the hospital.

The digital photo serves as a critical tool in quality assurance. First the magnified

photo is a tool for more detail. Second, if the nurse is unsure of the diagnosis, she can email the photo to the doctor for a second opinion. Third, every photo is

saved as a record and used to compare to the other photos over time, forming an educational library for health care worker training. Since 2009, every photo has been saved and used to evaluate the performance of the health care workers as well as determine when over treatment has occurred. Dr. Masire, an advocate for this approach, states that there are times, relatively few that they are, when patients have been misdiagnosed and treated for lesions that were not actually present. However, she argues that over treatment is preferable to under treatment. "The risks of missing those pre-cancerous cells and having them develop into cancer are far greater than the slight discomfort of sloughing off the top layer of the cervix."

Some doctors or policy makers have questioned the "See and Treat" approach as 'poor care for poor people,' but Dr. Masire believes that is not the case. "In this setting, with these resources, 'See and Treat' makes the most sense. Some could say we are ahead of the curve. This innovation in service delivery may be adopted by wealthier western nations who seek these more cost- and medically-effective approaches in order to improve their own health systems."

Dr. Mimi Raesima, the Ministry of Health's National Cervical Cancer Program manager, agrees. "Here at the Ministry of Health, we're very excited with 'See and Treat' because this offers outpatient same-day examination and treatment. It doesn't require specialists. The approach is effective within our health system's



Dr. Doreen Ramogola-Masire takes a digital picture of the patient's cervix that she will then share and discuss with the patient.

current capacity and we can more clearly measure impact. With cervical cancer, impact is only made when women are treated and this process puts us in a better place to provide timely treatment."

Success Breeds Opportunity

One path to success has been paved in Botswana with the "See and Treat" approach. Now it can blossom to reach more women and save lives because new funding will propel forward the Ministry of Health's new *National Cervical Cancer Prevention Programme Strategy*. The national prevention strategy was written with the technical assistance of the CDC. The Botswana-UPENN Partnership's pilot program informed the Ministry of Health's short- and long-term priorities, clarifying where and how to invest its resources.



Former President George W. Bush visited Botswana in July 2012 to launch the PRRR initiative. After a tour of the Bontleng Clinic, he and Mrs. Laura Bush talked with Nurses Ditlhabang and Nchunga.

The strategy presently is designed to ensure that the single visit approach to screening, diagnosis, and treatment of cervical precancer is robust. Second, the focus adds prevention in the form of the human papillomavirus (HPV) vaccine. The main cause of cervical cancer is HPV, and the country will be building capacity to rollout this vaccine in 2017 after lessons are learned from a demonstration project in 2014.

Recognizing the strong partnership between the Ministry of Health, CDC Botswana, and the Botswana-UPENN Partnership as well as the success of the piloted "See and Treat" program, the Pink Ribbon Red Ribbon Initiative (PRRR) recently announced that Botswana would receive additional funding.

PRRR is a public-private partnership to expand and maximize the impact of the "See and Treat" program. The major PRRR international partners are the George W. Bush Institute, The President's Emergency Plan for AIDS Relief (PEPFAR), UNAIDS, and Komen Race for the Cure. PEPFAR awarded

USD\$3 million to expand services in Botswana—through infrastructure, training, and equipment—to five sites outside of Gaborone. As the Ministry of Health and the implementing partners scale up services, they will identify specific needs that the PRRR private partners may then meet.

The goal is clear: decrease women's mortality due to cervical cancer. Through the steadfast work of the health care workers, the technical collaboration of the partners, and the backing that the PRRR initiative provides, Botswana paves the way to achieve that goal.

Tebogo says, "This clinic saved my life. I feel so great. The nurse needs to continue to teach others the way she taught me. And I'll even continue to tell others. This clinic has made a great difference." Now, these partners in health continue to work toward more stories like Tebogo—those with happy endings.

*names have been changed





