

Innovative Action Against Non-Communicable Diseases

Protecting Women and Preserving the Family Core: Cervical Cancer Prevention in Thailand



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A counseling session on treatment options during implementation of the single visit approach for cervical cancer control in Thailand.

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Cervical cancer is the third leading cancer worldwide and the second most common cancer among women, with about 500,000 new cases and 250,000 deaths each year (5,6). The majority of cases, about 80%, occur in developing countries, and the leading cause of cervical cancer is the human papillomavirus (HPV).

Most cases occur in developing countries because access to cervical cancer screening and treatment of precancerous lesions is not widespread, and care is not always affordable for low-income populations (4). Like so many other non-communicable diseases (NCDs), cervical cancer is preventable, and successful, cost-effective, and low-cost options exist that can address this problem head-on. One such option that has had great success in Thailand is the single visit approach (SVA), which uses visual inspection with acetic acid (VIA) combined with cryotherapy, when necessary. Since its first application, the single visit approach has significantly increased coverage of cervical cancer screening and prevented cervical cancer occurrence, all at a minimal cost. The program focuses specifically on low-resource and rural areas, where women are at greater risk for cervical cancer. It should also be noted that HPV vaccines are currently available, but their use is not widespread in developing countries because of cost and availability.

We, at Arogya World, have chosen to highlight the single visit approach, because of its simplicity, cost-effectiveness, and most of all its important ability to prevent cancer and save lives. It is an extraordinary example of large-scale deployment of low-tech, low-cost surveillance and screening as an effective way to prevent NCDs. Furthermore, this example serves as an excellent model for cervical cancer prevention in other low-resource areas and developing countries.

This is Arogya World's third Case Study on NCD Prevention, Treatment, and Care Approaches that Work, and was prepared in collaboration with the Global Health Council. At the core of this, as in our other case studies, is great science, inspirational personal determination on the part of a small group of individuals, true collaboration between multiple parties and a progressive government. Creating a powerful combination that can surmount all obstacles to addressing NCDs. See this and our other case studies at www.arogyaworld.org.

Cervical Cancer Screening in Thailand

The Thailand story goes something like this. Each year, approximately 6,200 Thai women die from cervical cancer, making this a significant public health concern (3). Determined to make a difference in cervical cancer control, in 1999, a small group of doctors - with Dr.

Khunying Kobchitt Limpaphayom from the Royal Thai College of Obstetricians & Gynecologists (RTCOCG) among them - teamed up with the health non-profit Jhpiego, and the Thailand Ministry of Public Health (MOPH), to implement the demonstration project titled Safety, Accessibility, Feasibility, and program Effort (SAFE). This was carried out in Roi Et province in the Northeastern region of Thailand because it is a rural area and the use of Pap-based cervical cancer screening had not been successful in that area. Funded by the Bill & Melinda Gates Foundation through the Alliance for Cervical Cancer Prevention, the program ran for five years. During this time, a rigorous analysis was performed to evaluate the indicators of SAFE – VIA, SVA, and treatment when necessary. Since the program's outset, several other researchers have confirmed that this method is highly sensitive, effective, and a low-cost option for low-resource and rural settings.

The single visit approach was chosen because it is simple enough for trained nurses to perform without a physician present and it can be performed at low levels of the health-care system. What is important is good training of these healthcare workers, which the Thailand consortium of partners achieved. In addition, cervical cancer screening has been fully integrated into the daily work of public sector nurses, requiring no additional

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human resources to carry out the procedures. Moreover, VIA is effective in detecting pre-cancerous lesions and provides immediate results, allowing women to be linked to immediate treatment or referral (3). If a patient tests negative, they are advised to return in 5 years for another routine screening. If a patient tests positive, they are treated the same day (if eligible), and are then advised to return in 16 weeks and then one year later for a follow-up. Furthermore, because results are received immediately within a single visit, the loss to follow-up is minimal. The ability to treat patients within the same visit substantially increases prevention of cervical cancer.

After the initial five years of the SAFE program, the project was scaled up, and in 2003, the Thailand MOPH adopted the single visit approach as part of the national cervical cancer prevention strategy, along with the Pap smear.

Successes and Savings

The single visit approach has achieved remarkable results. Of the approximately 6,000 women who were tested in 2000, 13.3% were test positive, and of those eligible for immediate treatment, 98.5% accepted. At their one-year follow-up, 94.3% of women who had originally tested positive for pre-cancerous lesions were test-negative (1). By the end of 2006, about 300,000 women had been screened (3), and by 2008, 24 provinces were participating with coverage rates ranging from 26% to 58%, with some provinces achieving 80% coverage (4).

Along with the excellent coverage results, an equally great success is the cost-effectiveness and low-cost of the approach. The use of a Pap smear is still necessary for women between the age of 45 and 60, because of the cervical anatomy, however the single visit approach focuses specifically on women between the ages of 30 and 45, because the risk for pre-cancerous lesions is lower prior to age 30, and between age 45 and 60, a Pap smear is more appropriate. At present Thailand is using dual tracts of cervical precancerous screening. The use of VIA decreases costs and still maintains the effectiveness of screening by covering the critical 30 to 45 age group.

In 2000, the cost of a Pap smear, including personnel and supply, was \$US 7.50 per test, whereas the cost of VIA/SVA was only \$US 0.92 per test (2). The patient time cost (travel time, waiting time, diagnosis and treatment, etc.) is also less for VIA compared with the Pap test, with the Pap smear costing \$US 1.88 per test and VIA/SVA costing \$US 1.13 per test (2). Accounting for the direct cost and patient time cost, in total a Pap smear costs \$US 9.38 and VIA/SVA \$US 2.05, making the single visit approach a more cost-effective option when applicable (2). Over the course of a year, using VIA to screen women in Thailand aged 30-45 saved \$US 180,502 (2). Another factor important to the success of the single visit approach was the achievement of national policy change. The Thai government made it a national policy in Thailand that eligible women between the ages of 30 and 60 be screened for cervical cancer every five years (4). Adoption of the single visit method also led to policy that allows trained nurses to perform these procedures instead of physicians (4).

Formula for Success

The brilliant success of the single visit approach in Thailand was due to many important actors and steps. It began as a trial initiative through the generous help of foreign organizations such as the Bill & Melinda Gates Foundation with the Alliance for Cervical Cancer Prevention, Jhpiego, and key Thailand groups like RTCOCG and the Thai government. Through the SAFE initiative, several nurses were trained to perform VIA, which required the help of passionate doctors to ensure quality of care and practice. As the program grew and reached the end of its five-year term, the

single visit method began to gain international recognition and further support through the advocacy and hard work of committed women, doctors, and organizations. This ultimately led to a national policy change in Thailand in which the MOPH made the single visit approach part of the national program to screen women for cervical cancer every five years, as well as monitor and treat pre-cancerous lesions.

As one of the doctors integral to this initiative, Professor Khunying Kobchitt Limpaphayom of Chulalongkorn University in Thailand, brings home the importance of cervical cancer prevention and women's health. "The woman is the core of the family, and if she dies her children will face many difficulties. We must attack this problem, cervical cancer, to allow women to remain the pillar of the family. Our work is guided by this force and with the timely help and support of individuals and organizations, we can make a difference in the lives of Thai women." The single visit approach is affordable, effective, and preventative. This remarkable initiative can be applied in other countries with low-resource and rural settings, and has already been adapted in Vietnam, Indonesia, Malaysia, the Philippines, and

Uganda, among others. Cervical cancer can be prevented and women's lives can be saved.

References

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