

The Silence Between: Rotary Fighting Precancerous Lesions

General Project Overview

Rotary Club Morelia Tres Marias, located in the city of Morelia, Michoacán, Mexico, is an all women club founded in 2014. The club has focused their work in the areas of health and education.

The Colposcopy Clinic at Dr. Miguel Silva General Hospital needs a DEKA Smartxide MLT CO2 Gynecological Laser, to enable treatment of intraepithelial lesions that are precursors to invasive cervical, vaginal, and vulvar cancer in women infected with the human papillomavirus (HPV).

The Colposcopy Clinic at Dr. Miguel Silva General Hospital is located at Bosques de Eucalipto #415, Ejido de Atapaneo, CP 58253 in the city of Morelia, Michoacán, Mexico. Contact number: (443) 689 2609.

This is a "Humanitarian" project in the area of disease prevention and treatment.

Community Needs Assessment

The project team identified these needs through a structured community assessment that included in-depth interviews with key stakeholders across the healthcare system and the broader community. Participants included hospital leadership, gynecologists, colposcopy specialists, nurses, community health providers, a psychologist and patient advocate, and patients.

In addition to qualitative interviews, the team reviewed regional health data and clinical trends related to cervical cancer incidence, diagnosis, and treatment outcomes. This combined approach provided both firsthand insight and supporting evidence.

Across all stakeholders, a consistent gap was identified between diagnosis and the timely treatment of pre-cancerous cervical lesions. This finding highlighted a critical need to improve access to appropriate treatment within the existing healthcare system and to ensure that patients receive care within the window when intervention is most effective.

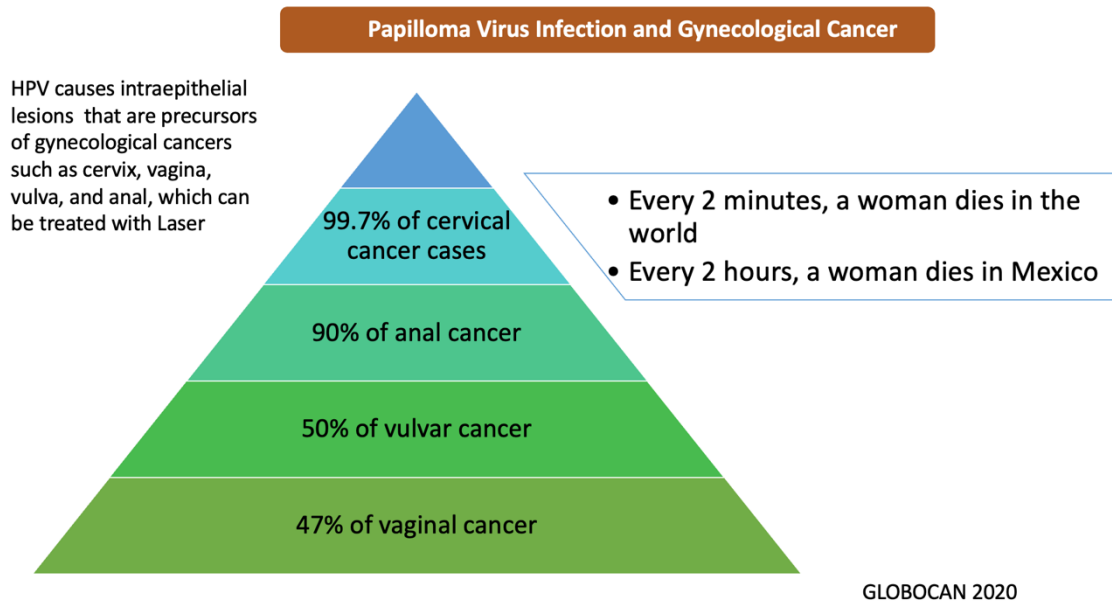
The human papillomavirus is the cause of lesions that have the potential to become cancerous. The most common types of gynecological cancer are cervical, vaginal, vulvar, and anal.

Injuries to the cervix, vagina, and vulva can be treated with laser many years before a cancer appears.

Currently, the colposcopy clinic at Dr. Miguel Silva General Hospital does not have this device. Lesions are treated with alternative methods that do not offer the

advantages of the laser, such as being a less invasive, and an outpatient treatment performed under local anesthesia.

Below are some statistics that explain the proportion of cancers associated with the human papillomavirus (HPV):



The chart shows that:

99.7% of women with cervical cancer are HPV positive.

90% of women with anal cancer are HPV positive.

50% of women with vulvar cancer are HPV positive

47% of women with vaginal cancer are HPV positive.

Treatment of intraepithelial lesions due to HPV is essential because of the alarming statistics of deaths due to cervical cancer

México

10,348 New cases

4,174 Deaths

2nd Cause of death since 2006

Michoacán

170 deaths due to cervical cancer

- In 2022 in Michoacan there were 170 deaths due to cervical cancer
- In 2022 in Michoacan there were 129 new diagnosed cases of cervical cancer
- The higher rates of incidence are found in Apatzingán, Morelia, and Pátzcuaro
- In Michoacan it is also the second cause of death of women over 25 years old.

SICAM 2022

In Mexico in 2022 there were 10,348 new cases of cervical cancer, 4,174 deaths due to cervical cancer, and it has been the second cause of death since 2006

In Mexico, there is an early detection program that includes cytology and HPV testing at the primary care level. Patients with positive results are referred to colposcopy clinics, where the diagnosis is confirmed, and necessary treatment is provided to prevent progression to invasive cancer. In case cancer is already present, they are referred to oncology centers to receive treatment.

As a Rotary Club, this issue has alarmed us. We have worked on supporting early detection; conducting campaigns in communities near Morelia, including El Páramo, El Correo, Acuitzio del Canje, Tzio, Paso Ancho, La Angostura, Copuyo, and Queretanillo, accompanied by our Rotarian gynecologist, María Guadalupe González González. We take the gynecologist and the necessary equipment to conduct studies at the communities. We deliver the results and refer women who require further care.

Different methods exist to treat specific intraepithelial lesions, but using the CO2 surgical gynecological laser is undoubtedly the best option because it is less invasive, an outpatient treatment, and it is used with local anesthesia. It is an essential tool for treating intraepithelial lesions that are precursors to cervical, vaginal, anal, and vulvar cancer in women with HPV. This equipment allows for faster treatment with shorter sessions needed, making it more accessible in terms of time and required procedures for success. For the hospital, having the laser will

allow the colposcopy clinic to be able to treat more patients because the colposcopist will be able to give more medical appointments during their work day.

The Colposcopy Clinic at the Dr. Miguel Silva General Hospital in Morelia, Michoacán, serves an average of 2,000 patients annually, about 500 of whom require some form of treatment. Timely and appropriate management significantly reduces the progression of lesions and mortality from gynecological cancer.

For these reasons, colposcopy specialists and Dr. Abraham Flores Vargas, Director of the Dr. Miguel Silva General Hospital at that moment, approached our Rotary Club to request this equipment. At this moment the Director is Dr. Rafael García Ramos.

Summary

As part of the community needs assessment, we investigated global, national, and local statistics. We listened to the feedback from women in the communities we visited and from patients undergoing treatment at the clinic. We also gathered testimonials from colposcopist gynecologists working at the clinic and the hospital director, who emphasized the urgent need to acquire this equipment for the city.

Providing this equipment offers multiple benefits to patients. By enabling minimally invasive treatments, it allows them to continue their daily lives with less discomfort and reduces the risk of cancer progression.

Objectives and Goals

Cervical cancer remains a significant and preventable health burden in the Morelia region, particularly among women served by the public healthcare system. Despite the presence of trained medical professionals and established screening programs, a critical gap exists between diagnosis and the timely treatment of pre-cancerous lesions.

Through interviews with hospital leadership, gynecologists, nurses, community health providers, and patients, a consistent pattern emerged: women are often diagnosed at a stage when intervention is still possible, but delays in access to appropriate treatment result in disease progression.

As one clinician noted, “There is a moment when this can be stopped, but we are missing that moment too often.”

These delays are driven by a combination of high patient volume, limited access to appropriate treatment technology, and systemic constraints within the public healthcare infrastructure. As a result, many women who could be treated effectively at an early stage instead progress to invasive cervical cancer, placing a significantly greater burden on both the patient and the healthcare system.

Across all stakeholders, a clear and consistent priority emerged: the need for

earlier, faster, and more accessible treatment of pre-cancerous cervical lesions.

This project is designed to directly address that gap by strengthening the pathway from diagnosis to timely treatment.

To provide the Colposcopy Clinic at the Dr. Miguel Silva General Hospital with a DEKA Smartxide MLT CO2 Gynecological Laser so that the clinic can offer effective and minimally invasive treatments to 100% of its patients who are undergoing treatment for intraepithelial lesions that are precursors to invasive cervical, vaginal, and vulvar cancer in women with human papillomavirus (HPV).

To actively involve Rotary International, members of the Rotary Club Morelia Tres Marías, and other clubs in raising awareness of the high percentage of women affected by this condition, the impact it has on their lives, and the need for joint support to ensure these women receive care.

By having this laser, the state of Michoacán can better serve the local population and patients from neighboring states, such as Guerrero, where many patients seek treatment due to the geographical challenges in their region.

Sustainability

The equipment will be operated by trained gynecologists and clinical staff at Hospital General Dr. Miguel Silva, specifically those working within the gynecology and colposcopy services. These clinicians are already experienced in the diagnosis and management of cervical pre-cancer and will integrate the technology into routine patient care.

Training will be provided at the time of installation and will include hands-on instruction to ensure proper and consistent use. This initial training is expected to take place over a period of approximately 2 to 4 weeks, followed by continued skill development through regular clinical practice.

The hospital will be responsible for the ongoing operation and maintenance of the equipment. Maintenance will be supported through the manufacturer's warranty and service plan (details to be confirmed), ensuring continued functionality and reliability. The hospital has committed to incorporating all routine maintenance requirements into its standard operational procedures.

Because the technology will be fully integrated into existing clinical workflows and managed by established medical staff, no additional personnel or external support will be required for its continued use.

Community-based healthcare providers at Hospital General Dr. Miguel Silva will be responsible for the ongoing operation and maintenance of the equipment as part of routine clinical services. The hospital's gynecology and colposcopy teams, supported by hospital administration, will oversee its proper use, care, and long-

term functionality.

The company Instituto Láser y Luz Pulsada de México has the capacity to provide technical maintenance, service support, and access to necessary spare parts and replacements. This ensures that the equipment can be properly serviced and maintained over time.

In addition, the hospital has biomedical engineers with the technical expertise required to perform routine maintenance and coordinate external servicing when needed. The hospital has committed to incorporating maintenance and any required replacement parts into its ongoing operational planning, ensuring continued functionality beyond the period of Rotary funding.

To support the project's sustainability, the equipment will be acquired through a local vendor. The preferred vendor is Instituto Láser y Luz Pulsada de México, located in Guadalajara, Jalisco, Mexico.

The Dr. Miguel Silva General Hospital has the adequate physical space for the installation of the equipment. It is a safe space with the required electrical installations.

Budget

The budget for the DEKA Smartxide MLT CO2 Gynecological Laser equipment is in Mexican pesos since the intention is to purchase it from a Mexican distributor: Instituto Láser y Luz Pulsada de México, located at 3363 Calle Tarascos, first floor, Guadalajara, Jalisco, CP 44670, Mexico.

Category	Description	Vendor	Cost in local exchange	Cost in USD
Equipment	DEKA Smartxide MLT CO2 Gynecological Laser with a surgical laser micromanipulator for colposcopy.	Instituto Láser y Luz Pulsada de México	\$1,620,000	\$92,572.00
Promotion	Plaque		\$10,000	\$571.00
Management	Contingency		\$90,000	\$5,143.00
Monitoring & Evaluation	Project Coordinator		\$45,000	\$2,571.00
Total			\$1,765,000	\$100,856.00

- Exchange rate of \$17.50 Mexican pesos.
- Includes: Shipping, installation, and user training.



3363 Calle Tarascos
Primer piso
Guadalajara, Jalisco, 44670
Mexico
33 3813 1212

Cotización
26-02-2026 10:25 am

N.º cotización: 4683
Ticket: 220000005197
Registro: Register 1
Empleado: Iván
Cliente: Club Rotario Morelia 3 Marías

Artículo	Cant.	Precio
SMARTXIDE		
Láser CO2 de 40w quirúrgico		
Micromanipulador		
Pieza de corte quirúrgico		
Scanner fraccionado robótico	1	\$1396551.72
Piezas de Atrofia vaginal 360 grados		
Pieza de Incontinencia 90 grados grande		
Pieza de incontinencia de 90 grados pequeña		
Pieza recta de tratamientos vulvares y personales		
Subtotal		\$1396551.72
IVA (\$1396551.72 @ 16%)		\$223448.28
Total impuestos		\$223448.28
Total		\$1620000.00

NOTAS
Entrega e instalación en la dirección solicitada. Capacitación en el uso del equipo por Ginecólogo certificado. Duración 2 días. Mantenimientos cada 18 meses con un costo de 10 mil pesos más iva.
Gracias Club Rotario Morelia 3 Marías !



Funding

Source	Amount in USD
FDD 4140	\$500.00
Rotary Club Tres Marias	\$2,000.00
FDD 5240	\$10,000.00
Rotary Club Bakersfield East	\$10,500.00
FDD	\$8,400.00
Total	\$31,400

Contact Information

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