Project C.U.R.E's cervical cancer screening and treatment program

By Carolyn Bottone-Post, DNP, CNM

lobally, the World Health Organization (WHO) estimates over 300,000 women die each year from cervical cancer, with 9 of 10 residing in middle- to low-resource countries.¹ Cancerous and precancerous cellular changes due to human papilloma virus (HPV) are responsible for most of these deaths. To reduce cervical cancer morbidity and mortality, efforts must focus on both consumer and provider education regarding prevention, screening, and treatment of this disease. This commentary explains the efforts of Project C.U.R.E. [Commission on Urgent Relief and Equipment] to eradicate cervical cancer morbidity and mortality, focusing on low-resourced countries. Short-term mission trips are suggested as a way that women's healthcare providers can dramatically aid women's health with brief but impactful commitments.

Project C.U.R.E. is a nongovernmental organization (NGO) that aims to help low-resource countries achieve better population health by partnering with local healthcare providers and empowering them through the provision of educational opportunities, supplies, and volunteers to help close the resource gap. It was founded in 1987 by Dr. James Jackson who traveled to Brazil on a consulting trip and was invited to visit a small clinic outside of Rio de Janeiro. Dr. Jackson was stunned by the lack of available healthcare supplies and providers, finding providers lacking essential resources, which resulted in a population without healthcare and/or devoid of hope. Promising clinic staff to return with much needed supplies, he arrived home to Colorado and enlisted support from his local network to collect usable medical supplies at their respective facilities. He filled his garage with donations and paid to ship a cargo container of precious supplies to Brazil. Over time, his efforts to amass donations grew dramatically, with his son Dr. Doug Jackson eventually assuming leadership. Under his direction, Project C.U.R.E. expanded from one to several large distribution warehouses nationwide, each collecting supplies ranging from bandages and scalpels to hospital

beds, ultrasound machines, and other large items, as well as promoting fundraisers to help offset costs to obtain equipment and supplies.

Project C.U.R.E. has a small paid staff and relies primarily on the efforts of countless volunteers to reach patients and providers in 130 countries. Once a country requests help obtaining supplies, a Project C.U.R.E. representative travels there and, together with community leaders and partner organizations, performs a needs assessment, establishing what critical needs and resources are required to improve or expand current services. The needs assessment determines what resources will be of the most help, and a 40-foot cargo container is loaded with supplies and shipped. Each container holds approximately \$400,000 worth of medical supplies and equipment that is appropriate to available local technology. Countries are asked to pay a portion of shipping costs, usually about \$500.00, to promote buy-in and involvement of local leaders, also promoting a sense of project ownership. Local leaders, Project C.U.R.E representatives, and other individuals from the community are present for the off-loading of the container. Project C.U.R.E biomedical engineers make certain that equipment is compatible with local services, assisting with delivery and installation. Medical teams from the organization arrive soon after this, including physicians, advanced practice registered nurses, physician assistants, nurses, and a few nonmedical personnel to hold Project C.U.R.E. clinics alongside local providers. These clinics address identified healthcare concerns and provide education to local medical teams as indicated.

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Photo. Teaching the process of VIA screening to another C.U.R.E. volunteer.

Vaccine development and distribution has aided HPV prevention in developed nations. HPV vaccines became commercially available around 2006 and provide excellent protection against many HPV-related cancers. Both the WHO and the Centers for Disease Control and Prevention (CDC) recommend HPV vaccines be given in a 2- or 3-dose regimen for children age 9 to 15 years as well as teens and adults through age 26 years. Although prices vary, each dose of vaccine costs about \$250 and is covered by most private insurance and Medicaid. The vaccine is also available in the United States through the Vaccines for Children program at low or no out-of-pocket cost. Since release of the vaccine in 2006 through 2018, an estimated 90 to 100 countries have added HPV vaccines to their vaccine programs; however, only 13 have been identified as middle- to low-resource countries, highlighting disparities.³ To address these inequities, a WHO goal is to achieve HPV vaccination for 90% or more of all girls in low-resource countries by age 15 years by 2030. Estimates suggest that vaccination of preteen girls and providing effective screening twice in a woman's lifetime could result in reducing rates of cervical cancer to 4 per 100,000 women years, essentially achieving elimination.⁴

Project C.U.R.E. is tackling healthcare disparities regarding cervical cancer among women in low-resource countries by developing training and educational resources to provide visual identification with acetic acid (VIA) on every medical trip as an optional service for women. Using this fiscally sustainable and efficacious method, providers screen for precancerous lesions, provide immediate treatment using a low cost and minimally invasive form of cryotherapy, or facilitate local referral for extensive lesions or cervical cancer. Further, these volunteer Project C.U.R.E. women's health specialists provide instruction to local staff to ensure sustainability of the project. Previously, VIA and cryotherapy was offered as a supplemental service during only a few regularly scheduled medical clinics in India and Paraguay. Project C.U.R.E. wishes to increase availability and offer this service on every clinic trip where possible (*Photo*).

To provide this lifesaving service to a wider population, Project C.U.R.E. assembled a team of nurses, women's health nurse practitioners, and nurse midwives to create a plan to offer this service on all clinic trips, as desired by partner organizations. The team is developing a program that includes teaching resources, provider instructions, program outline, learning resources, packing lists, and remote and onsite teaching resources for partnering clinics. The goal is to teach local providers cervical cancer screening and treatment procedures and offer this service to as many women as possible on every trip. Additionally, sustainability of this important program requires training at least one local provider per trip on the procedures. Virtual support will be available to in-country providers via Zoom calls. Although travel has been postponed due to the global Covid-19 pandemic, the team hopes to have all program materials completed and virtual training for interested partners piloted soon. We plan to be prepared for a full rollout of the program as soon as travel resumes.

Project C.U.R.E.'s program aligns with the WHO's strategy to eliminate cervical cancer, which is preventable if screening and treatment are done in the early stage of the disease. Project C.U.R.E. clinics allow volunteer providers opportunities for meaningful international travel over a 7- to 10-day period, which more easily fits into work and home life and is more affordable than a long-term mission trip. During a trip to Paraguay in 2016, I provided VIA and cryotherapy as described previously to more than 200 women in four remote clinics and provided education to clinic providers at each site to allow this service to be offered by them going forward. Ideally, I would like to see Project C.U.R.E. facilitate vaccination of women each time VIA screening and treatment is performed in low-resource *(continued on page 52)*

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countries through Project C.U.R.E. clinics. This would likely require increased understanding of the role of HPV vaccines in disease prevention by clinic partners and local ministries of health. GAVI [Global Vaccine Alliance], in partnership with the Gates Foundation and World Bank, has reduced prices to \$4.50 per dose, but this price remains a huge obstacle in low- and middle-resource countries.⁵ Fundraising efforts could be aimed at providing a sustainable vaccine supply in these countries and adequate refrigeration facilities when traveling to Project C.U.R.E. clinic sites with unreliable power sources.

Women's health nurse practitioners, nurse midwives, and other specialists may partner with Project C.U.R.E on short-term medical mission trips to fight against disparities. The women of the world deserve no less. Please visit the Project C.U.R.E. website at **projectcure.org/ take-action/donate/**^A to donate supplies or contact our Project C.U.R.E. clinics and college manager Aubrey Buchmann at AubreyBuchmann@projectcure.org.

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Web resource

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