

## The Development of a Cervical Cancer Prevention Program for Underserved Women in the Dominican Republic

Kymerlee Montgomery, DrNP, WHNP-BC, and Owen C. Montgomery, MD, FACOG

Often referred to as the “Jewel of the Caribbean,” the Dominican Republic (DR) boasts more than 1,000 miles of majestic, white sandy beaches outlining the clear, blue, sparkling Caribbean Sea. However, beyond the golden sunsets of the beautiful country lie the tragedy and stark reality for many women living in poverty: the extremely high incidence and mortality rates of cervical cancer. Cervical cancer, a largely preventable disease, is taking the lives of women in the DR at an alarmingly high rate.

The purpose of this article is to explore the challenges for nurses in understanding the magnitude of the cervical cancer burden and the existing barriers to risk reduction and prevention in the DR. The article will help nurses develop a plan for a comprehensive, multifaceted, and culturally sensitive cervical cancer prevention program.

The College of Nursing and Health Professions at Drexel University in Philadelphia, PA, has the first and only clinical research doctor of nursing practice (DrNP) degree in the nation and encourages advanced practice nurses (APNs) to rigorously identify and explore global nursing practice issues and utilize research and leadership skills to advocate for improvements to benefit the population and nursing practice. DrNP-educated nurses are highly capable of engaging in evidence-based, informed nursing practice in a variety of settings; participating in and leading interdisciplinary research teams; and conducting clinical research in practice settings (Dreher, Donnelly, & Naremore, 2005). As a nurse practitioner and DrNP candidate at Drexel University, the first author of this article organized a mission to the DR in 2007 as part of her course work for the DrNP “Clinical Role Practicum” course. The goal of the mission was to reach out to underserved

populations in the island nation in an attempt to further broaden her exposure to health and education issues related to human papillomavirus (HPV) and cervical cancer. The experience—providing actual care and education to the poor DR women in urban Santo Domingo and rural Jarabacoa, evaluating barriers to cervical cancer preventive measures, and identifying possible research opportunities—led to recommendations for possible cervical cancer prevention strategies.

### The Dominican Republic

The DR comprises the eastern two-thirds of the island of Hispaniola, between the Caribbean Sea and the North Atlantic Ocean, and shares a long area of border on the east with Haiti, one of the poorest, least developed, and least stable countries in Latin America (USAID, 2008). Approximately nine million citizens live in the DR, with 60% of the population living in urban areas and 40% sprinkled throughout the rural, mountainous areas (Central Intelligence Agency [CIA], 2008). Thirty percent of Dominicans live below the poverty line, with an average per-capita income of \$2,500. The DR has a maldistribution of income, with the top 20% of the population receiving 55% of the total income (CIA). In addition, on average, Dominicans have only 4.9 years of schooling, and the education spending as a percentage of gross domestic product (GDP) is 2.3%, which ranks the DR in the bottom 10 countries in the world. Public health is a low priority for the government, as exemplified by the total health expenditure on the public as a percentage of the GDP—1.9%, which ranks in the bottom quarter of all countries (World Health Organization [WHO], 2008). The large number of poor, illegal Haitian immigrants

augments the DR poverty burden and mortality rates. The statistics describe the harsh reality of life in the DR and are predictors of the barriers to the success of cervical cancer prevention programs.

### Cervical Cancer Conditions in the Dominican Republic

The incidence of cervical cancer in Latin America and the Caribbean is among the highest in the world, with an average regional estimate of 29.2 cases per 100,000 women (Parkin et al., 2008). Specifically, the DR has a population of approximately 2.98 million women aged 15 years or older who have an increased risk of developing cervical cancer. WHO (2008) reported that every year approximately 1,032 women are diagnosed with cervical cancer. More than half of the women die from the disease. Ranked as the second most frequent cancer in the DR, cervical cancer is grossly underestimated; thousands of women in the DR, including Haitian immigrants, never receive medical care and die undiagnosed.

Advances in scientific technology have led to promising primary prevention opportunities in developed countries. They include prophylactic HPV vaccines, which can eradicate the cause of 70% of worldwide cervical cancer cases, and new screening technology to facilitate early detection. Numerous valiant efforts to bring scientific advances to poor, underserved populations are ongoing; however, they have been unsuccessful in substantially reducing mortality from cervical cancer in the DR.

### Barriers to Cervical Cancer Prevention

Women in the United States and other developed nations benefit from primary