Award ID: PP160097

Project Title: School-Based Human Papillomavirus Vaccination Program in the Lower Rio Grande Valley

Award Mechanism: Evidence-Based Prevention Programs and Services

Principal Investigator: Rodriguez, Ana

Entity: The University of Texas Medical Branch at Galveston

Lay Summary:

Need: The HPV vaccine reduces the morbidity and mortality of HPV-related diseases, including anogenital warts and cervical, oropharyngeal, vulvar, vaginal, penile, and anal cancer.[1-9] Guidelines recommend HPV vaccination for girls and boys aged 11–12, with catch-up doses for ages 13–26.[7,9] We will use the 9-valent HPV vaccine, which covers 5 additional HPV cancer-causing types and is estimated to prevent 15% more cervical cancer than the quadrivalent vaccine. The 3-injection HPV vaccine series has to be given in early adolescence to maximize effectiveness. It provides the greatest benefit to adolescents before they become sexually active.[30] The Healthy People 2020 goal is to vaccinate 80% of 13–15-year-olds.[11] US completion rates for girls and boys aged 13–17 are 40% and 22%, respectively.[12,13] Increasing rates to 80% would prevent an additional 53,000 cervical cancer cases over the lifetime of those 12 years.[14,15] Since HPV-related diseases disproportionately affect low-income, rural, and minority individuals, the vaccine is important in medically underserved areas, like Starr County in the Rio Grande Valley (RGV).[9] RGV women have 30% higher cervical cancer incidence and mortality rates than women in other regions.[18] Starr County also has low uptake of the HPV vaccination (27.9%–35.8% for females and 21.1%–29.9% for males aged 9–18) and a high proportion of uninsured residents.[19-21] Vaccination in alternative settings in medically underserved areas can improve HPV vaccine uptake. Schools are promising because of their reach and demonstrated success in providing other vaccines.[9,23,24] Despite not being mandated, countries offering school-based HPV vaccination programs are successful (completion rates ≥70%).[25-27] Current HPV vaccination efforts in Starr County are not school-based and do not target the recommended age group or boys.[28] Thus, this area, which faces a substantial risk of HPV-related cancer, would benefit from a program that reduces vaccination obstacles for preadolescents. Overall Strategy: Our goal is to increase HPV vaccination completion rates to 80% among 7th graders in the Rio Grande City Consolidated Independent School District (RGCCISD). We will create a school-based HPV program offering educational sessions for parents/guardians and free HPV vaccination. Our proposal is a collaboration of RGCCISD; Starr County Health Department; The University of Texas Health Science Center School of Public Health, Brownsville Regional Campus; The University of Texas MD Anderson Cancer Center; and The University of Texas Medical Branch. In Year 1, we will collect baseline HPV vaccination rates and implement an educational program for parents, school district employees, local healthcare providers, and community leaders. In
Year 2, we will pilot the school-based HPV vaccination program at 1 RGCCISD middle school. In Year 3, the program will expand to all 4 RGC middle schools. We expect to vaccinate 852 7th graders and reach 1,704 parents/caregivers and 20 healthcare providers. Goal 1: Implement an HPV vaccination education and awareness program for stakeholders. Improve knowledge and reduce barriers to increase uptake of HPV vaccination among 7th graders. —Educate parents/caregivers of 7th graders on HPV vaccination. Hold 2 PTA educational sessions. —Emphasize the importance and safety of HPV vaccination among RGCCISD employees. —Increase awareness and support among local healthcare providers. Goal 2: Increase HPV vaccination completion rates to 80% of 7th graders in RGCCISD. Implement a school-based program with key stakeholders to improve access to the vaccine. —Vaccinate 80% of the 7th graders at 1 middle school as a pilot program (Year 2). —Vaccinate 80% of 7th graders at 3 additional middle schools (Year 3). Goal 3: Track and document HPV vaccination rates using the statewide Immunization Tracking System (ImmTrac). —Consent parents to register their children for ImmTrac. —Encourage providers to import immunization data into ImmTrac.

Innovation: The major innovation of this proposal is delivering the HPV vaccine in a school setting in conjunction with local medical providers and the county health department. This is the 1st school-based HPV vaccination program in Starr County and one of the 1st in Texas. We focus on RGV because the cervical cancer incidence and mortality rates are 31% higher than other counties. Significance & Impact: The aim of this project is to increase HPV vaccination uptake in Starr County by implementing a school-based HPV vaccination program. More than 80% of the annual cost burden for HPV-related diseases in the US is due to cervical cancer screening and follow-up. Administering the vaccine through a school-based program will improve HPV vaccine uptake at the ideal age and reduce the number of HPV-related cancers in the future. If successful, our program can be disseminated in other RGV school districts and throughout the US.