Developing Mentorship and Training Curriculum to Reduce Burden of Cervical Cancer in Medically Underserved Areas of Texas

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Introduction

- Cervical cancer is one of the most common cancers in women worldwide with an estimated annual incidence of 600,000 and mortality of 340,000.
- In 2020, close to 300,000 women were living with cervical cancer in the US.
- Cervical cancer-related death in Texas is 2.8 per 100,000 women, 27% higher than comparable national rates.
- Medically Underserved Areas (MUAs) in Texas have a shortage of providers trained to diagnose and treat preinvasive cervical cancer.
- This project strives to improve capacity and expertise in colposcopy, cervical biopsy, and identification of preinvasive lesions through mentorship training tailored to partners in MUAs.

Methods

The mentorship training is designed for physicians, ob-gyn and family medicine residents, physician assistants, advanced practitioners, and students of partners in medically underserved areas of Texas.

The mentorship will include

- A self-paced review of required recorded lectures and post-tests.
- Two MD Anderson cervical cancer prevention courses including both components of didactics and hands-on training,
- Attend four colposcopy image review sessions,
- Identify a clinical mentor, and obtain approval from the program,
- Attend a set number of Project ECHO (Extension for Community Healthcare Outcomes) Cervical Cancer Prevention sessions,
- Present a set number of patient cases during, project ECHO sessions,
- Perform colposcopy, cervical biopsy, endocervical curettage, and vulvar biopsy.

Figure 1. The MD Anderson team provides Colposcopy hands-on training in MUA.

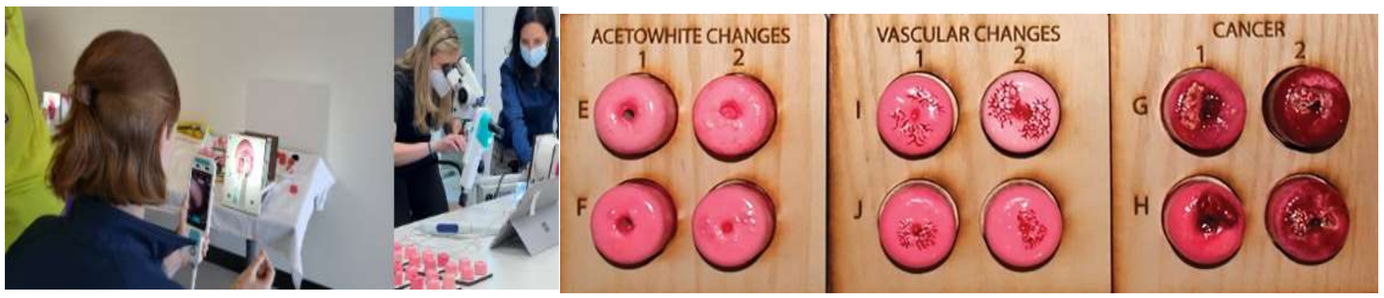

Figure. 2 Collaborators from the Rice360 Institute at Rice University have developed low-cost cervical cancer innovative training models that allow our mentees to simulate different cervical cancer screening and early treatment techniques including VIA, colposcopy, cervical biopsies, cryotherapy, and LEEP. The models include a low-cost pelvic frame that allows the trainee to simulate a gynecologic exam..

Results

- We anticipate overall knowledge, confidence, and skills to improve in participating healthcare providers.
- We expect these capacity-building efforts to impact disparities in adequate screening and effective treatment access in MUA of Texas.
- We hope to see an expansion of available services and a reduction in the cervical cancer burden in MUAs of Texas.

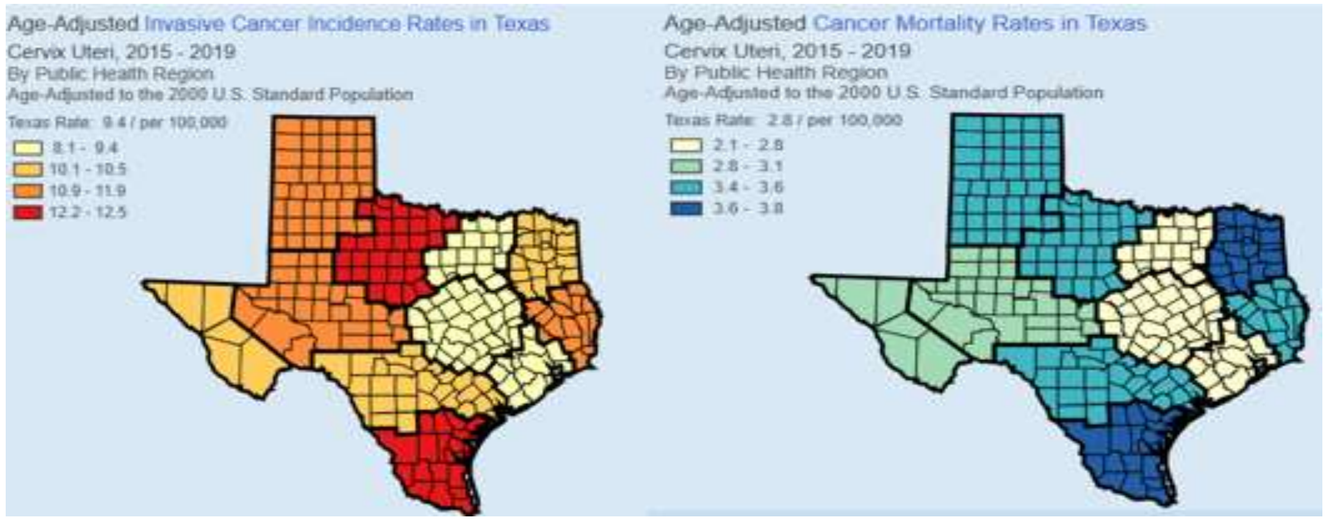

Figure 3. Age-Adjusted Invasive Cervical Cancer Incidence and Cancer Mortality by Public Health Region

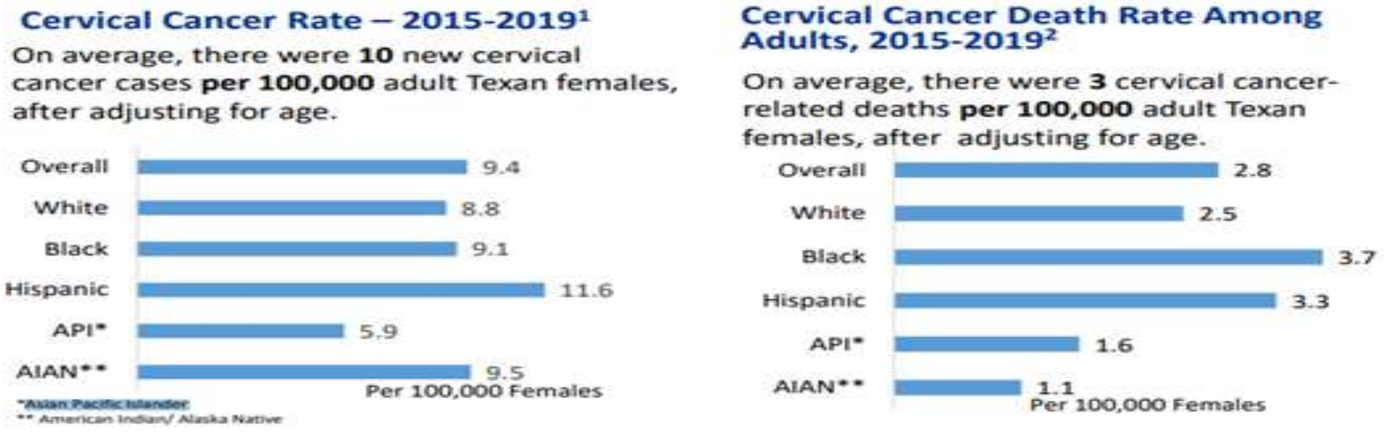

Figure 4 Racial/ethnic disparities in cervical cancer incidence and mortality in Texas.

Conclusions

- To eliminate cervical cancer as a public health problem, secondary prevention such as colposcopy and Loop Electrosurgical Excision Procedures (LEEP) training for providers in low-resource settings are essential.
- This comprehensive training is expected to support capacity building for cervical cancer prevention in Texas, It can also be used in other low-resource settings globally and be translated into other languages.

Responsible Conduct of Research

- Incidence rates of cervical cancer have currently leveled off and remain unacceptably high for a preventable disease. It is responsible conduct of research to devote our efforts to reducing the burden of preventable cancers.
- A secured REDCap (Research Electronic Data Capture) database will be created for mentees to keep a log of all procedures performed. Questionnaires will be anonymous and only group data will be reported.

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Reference