

A Multi-Pronged Approach to Increase Oral Head and Neck Cancer Awareness and Prevention in West Texas: A Collaborative Practicum

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Introduction

West Texas (and eastern New Mexico) is a microcosm of the health disparities present in the United States. There is a diverse population in the region that includes rural communities, underserved communities, and migrant populations. Oral head and neck cancer (OHNC) is a persistent issue in the region that affects each of these communities. Additionally, there is only one head and neck fellowship trained otolaryngology between Albuquerque and Abilene, a distance of nearly 500 miles. This further perpetuates the disparity. Additionally, this project is based on the data collected in a survey study of underserved and unhoused patients at a student-run free clinic that identified a large knowledge gap on the symptoms and risk factors of Head and Neck cancer.

Project description and methods

This project will be completed in three phases over the course of the 2024 Oral Head & Neck Cancer Awareness Week (OHANCAW) between April 15th and 21st. The three phases are outlined below.

Phase 1 aims to educate first- and second-year students on the pathology, risk factors, symptoms, treatment, and HPV association of OHNC, a subject that is seldom covered in preclinical curriculum. An interactive presentation by faculty, residents, and upper-level medical students involved in OHNC research will be given to any interested medical students. After this lecture, medical students will then be provided training on educating communities outside of medicine on OHNC, including high school students and adults from underserved backgrounds.

Phase 2 aims to address the knowledge disparity of OHNC among high school students in West Texas. Phase two will be conducted at Estacado High School in Lubbock, Texas. This high school is over 90 percent underserved minorities and is in the most impoverished part of Lubbock, east Lubbock. This area has no hospitals, very few ambulatory clinics, and has clear socioeconomic disparities in comparison with the rest of the city. This phase will involve an interactive session between the medical students who participated in phase one and high school students at Estacado High School. They will conduct a workshop in small groups to teach students about OHNC (particularly risk factors and screening) and HPV. A small gift will be provided to each high school student who attends the session to encourage robust participation. Information on a subsequent (OHNC) screening and HPV vaccination event (Phase 3) will be provided, and students will be encouraged to share this with their families. Finally, the phase will include collaboration with the City of Lubbock Department of Health to provide additional education on vaccinations and free health resources.

Phase 3 will be an OHNC screening and HPV vaccination event conducted at a site with a concentrated population of underserved individuals. The screening will be conducted by faculty and residents at the Texas Tech University Health Sciences Center School of Medicine Department of Otolaryngology. Both medical students and high school students will be invited to volunteer at this event. This will not only provide the students with community service credit, but it will also reinforce the educational objects taught in phases 1 and 2, respectively. Medical students will provide education at this event to all attendees. This screening event will be conducted at one of two locations: a student-run free clinic or a shelter for unhoused individuals. Aside from the advertisement conducted at Estacado High School, this event will be shared by the City of Lubbock Health Department, Low-cost and free healthcare clinics, and other community organizations that

work with underserved populations in Lubbock. A registration link will be provided on all advertisements (walk-ins will be welcome).

Target population

The target population includes medical students (Phase 1), high school students (Phase 2), and the greater Lubbock community (Phase 3).

Expected outcomes

Outcome 1: Medical students will gain a preliminary understanding of the pathology, symptoms, risk factors, treatment, and HPV association of OHNC. They will be able to apply their knowledge in two subsequent service-based events to further reinforce this understanding while serving their community.

Outcome 2: High school students will gain a rudimentary understanding of the risk factors and symptoms of OHNC and an overview of HPV and its association with OHNC.

Outcome 3: Community members will have access to free OHNC screening, education, and HPV vaccinations.

Outcome 4: Both medical and high school students will be able to volunteer at a community screening event to further enforce their learning and highlight the importance of addressing real-world OHNC disparities.

Expected impact on community health and understanding of head and neck cancer prevention and early detection

Underserved individuals, who often lack access to care and are susceptible to OHNC, will have access to free screening. This will identify any early cases of OHNC and patients who are at high risk for developing OHNC in the future. They will also have access to HPV vaccinations to help prevent the development of HPV-related cancers. These individuals will also gain an understanding of the risk factors and symptoms associated with OHNC, which will increase awareness, early detection, and cessation of risk enhancing behaviors. Younger members of the community will also be educated on OHNC, its risk factors, symptoms, and relation to HPV. This will help prevent the development of risk-enhancing behaviors, spark sharing of information and resources among underserved families, and create a heightened vigilance of OHNC that lasts beyond the OHANCAW.

Estimated cost

200 dollars: Funding for food costs provided to students in Phase 2

300 dollars: Funding for a small gift provided to high school students participating in phase 2

500 dollars: Funding for 10 dollar gift cards for the first 50 attendees of the screening project in phase 3.

Statement of other available funding for the project

We do not currently have other funding. However, we plan to apply for a grant from the Texas Medical Association Foundation (see link below) to help fund the HPV vaccination portion of the event. The city of Lubbock Department of Health will be overseeing the HPV vaccination portion of this project, and funding of the vaccines will be provided by them if the grant application is not selected.

<https://www.texmed.org/LocalImpactGrants/>