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2024 AHNS Cancer Prevention Service Community Service Award

Background:

Based on 2022 US census data, Miami-Dade County ranks the seventh-largest county in the country, with a population of 2,673,837 residents¹. It has a minority-majority composition, with Hispanics comprising the largest racial/ethnic group at 69%, followed by black non-Hispanics (17.1%), white non-Hispanics (13.8%), Asian non-Hispanics (1.7%), individuals identifying as two or more races (1.3%), and American Indian and Alaskan Native individuals (0.3%)¹. Miami-Dade County reflects a historical shift in racial demographics projected to unfold across the country over the next 25 years².

Targeted Population:

Despite its rich cultural diversity, Miami-Dade County grapples with significant socioeconomic disparities. According to the American Community Survey (ACS) 5-year estimate (2018-2022), 15.9% of the county population lives below the federal poverty level, surpassing the statewide rate of 12.9%³. While the overall percentage of residents holding at least a bachelor's degree in Miami-Dade County mirrors the statewide figure (32.5% vs. 32.3%), there are notable variations based on race (37.3% for White residents vs. 19.8% for Black residents) and ethnicity (55.2% for Non-Hispanic residents vs. 30.2% for Hispanic residents)³. Preliminary geospatial mapping analysis studies within our department have shown that Miami-Dade census tracts with the highest mortality rates from head and neck cancer have lower median education and income levels. We aim to target advertising to census tracts within Miami-Dade county where we have identified increased head and neck cancer mortality rates, in an attempt to screen more high-risk patients.

Methods:

Our team, composed of a head and neck surgeon (Dr. Zoukaa Sargi), Jackson Health System otolaryngology residents, University of Miami medical students, language translators, and nursing/administrative staff, will conduct screening events at 4 selected locations: Center for Haitian Studies (CHS) in Little Haiti, the Camillus House for the downtown Miami homeless population, Jefferson Reaves clinic and Miami Rescue Mission (MRM) clinic, both focused on serving the underserved Overtown community. During the screening events, medical students will perform comprehensive medical histories to identify head and neck cancer risk factors such as a history of tobacco and/or alcohol use, a family history of head and neck cancer, and/or

minimal dental care. An otolaryngology resident and/or faculty member will then conduct a physical examination. For patients identified as high risk or requiring further evaluation, a nursing/administrative team member will coordinate appropriate referrals. Patient navigators (medical students) will be assigned to ensure proper follow-up care at our local hospital's ENT clinic. All participants will receive information on how to acquire a "Jackson Card," which offers free to low-cost healthcare for low-income and uninsured individuals in Miami-Dade county. All fairgoers will also receive information brochures/pamphlets with educational content from the American Head and Neck Cancer Alliance (<https://www.headandneck.org>).

Expected Outcomes:

Following the event, our executive board will analyze patient demographics collected during intake to better understand whether our advertising truly targeted high-risk populations. Furthermore, we will assess whether our targeted advertisement approach--focusing on specific areas within Miami-Dade based on preliminary ArcGIS mapping indicating higher head and neck cancer mortality--led to a higher detection rate of participants exhibiting symptoms at an early stage of disease. High-risk patients will be directly connected to our Jackson Memorial Health System with support from patient navigators to ensure proper follow-up.

Estimated Cost/Funding:

The estimated cost of this project is \$1,000. \$300 will be allocated towards medical supplies (ie. gloves, mirrors, tongue blades, gauze, head lights, hand sanitizer). \$200 will be used to buy hygiene products (ie. toothbrush, toothpaste, floss) for fairgoers. We anticipate spending \$300 for promotional (flyers, radio announcements) and educational materials (ie. printing of educational brochures and pamphlets). Lastly, we will spend \$200 on translation services and in-person interpreters.

In October 2023, our project secured \$1000 in funding from the Wawa Foundation. This funding will be specifically allocated to support the distribution of food and drinks to fairgoers, considering our sites are located in areas of Miami-Dade in which residents are grappling with homelessness and food insecurity.

References:

1. United States Census Bureau QuickFacts. Accessed February 21, 2024. <https://www.census.gov/quickfacts/fact/table/miamidadecountyflorida,US/PST045223>
2. Vespa J, Medina L, Armstrong DM. Population Estimates and Projections. <https://www.census.gov/content/dam/Census/library/publications/2020/demo/p25-1144.pdf>
3. Florida Department of Health. Non-Vital Indicators Data Viewer. FL Health Charts. Accessed February 21, 2024. <https://www.flhealthcharts.gov/ChartsDashboards/rdPage.aspx?rdReport=NonVitalIndGrp.Dataviewer&cid=9774>
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