

Editorial

## Disparity in Racial Disparity Data in the Head and Neck Cancer Population

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Head and neck cancers are an overall rare but debilitating collection of disease processes that invariably affect patient quality of life. The head and neck region is unique in that dysfunction often interferes with multiple senses, impairs different forms of communication, in addition to vital functions such as breathing and swallowing. Although head and neck cancer is infrequent overall with approximately 55,070 new cases diagnosed yearly [1], the significant comorbidities associated with this subset of cancer are profound. For this reason early, goal-directed treatment is paramount.

The field of otolaryngology continues to expand. This is particularly the case in oncologic subspecialties, with increasingly more fellowship trained surgeons graduating to care for a head and neck cancer population that will likely begin to grow within the next decade due to the increasing incidence of HPV related cancer. Unfortunately, even as more eyes turn to this debilitating subset of cancer, one glaring disparity, racial disparity, remains obvious.

Racial disparity in the head and neck cancer population has been extensively studied and documented, particularly when comparing the African-American and White populations. Prevalence remains similar between the two populations, but a significant difference in survival rates, overall survival, and stage

at diagnosis persists [2-5]. Socioeconomic determinants such as insurance status contribute to the disparity seen between the African-American and White populations [4]. In addition, low levels of public knowledge, lack of knowledge of specific risk factors, and a sense of mistrust make it more difficult to completely close the gap [6-8].

The majority of the literature on racial disparity in head and neck cancer focuses on African-Americans in the United States, but fails to define other large minority populations, specifically, Hispanics. Hispanics comprise 17% of the United States population, whereas African-Americans represent 15% of the United States population [9]. Still, comprehensive cancer databases such as the SEER Database do not detail many data points for the Hispanic population when compared to the White and African-American populations [10].

In well-differentiated thyroid cancer, Hispanic patients present with localized disease at a lower rate than do White or African-American patients (57.9% vs. 69.5, 76.0%) and present with regional metastasis at a higher rate (35.6% vs. 16.7, 26.3%). Interestingly, in this same cohort of patients, Hispanics were among the highest in overall survival after adjusting for demographics, stage, and treatment variables [11]. Hispanics also have less access to surgeons with high case volumes

for thyroid and parathyroid surgery when compared to White patients [12]. This same study demonstrated improved outcomes in patients who were cared for by surgeons with high surgical volumes.

In squamous cell carcinoma of the head and neck, the data on Hispanic patients is even more limited. One study demonstrated a trend towards a higher cancer stage at presentation in Hispanics, but without a difference in survival after univariate analysis [13]. However, Hispanic patients lost more weight and had lower serum albumin compared to their White counterparts, which were two variables that were found to be associated with a poorer prognosis in this study. For salivary gland carcinoma, there was no overall disease-specific survival disparity when comparing Hispanic patients to their White counterparts [14]. In fact, a trend towards higher survival was seen in Hispanic patients with mucoepidermoid carcinoma. In sinonasal squamous cell carcinoma, Hispanic patients have poorer disease-specific survival compared to their White counterparts, due to more advanced disease stage at presentation [15].

The gap in racial disparity seen between White and African-American head and neck cancer patients has decreased in the past two decades [3,8]. The reason for this is likely multifactorial – decrease in overall incidence of head and neck cancer, awareness of the racial disparity, and extension of screening programs in areas of low socioeconomic status areas all play a role. Active screening in areas of low socioeconomic status is a modifiable variable that can have great influence in bridging the gap of racial disparity, particularly since these actions focus on prevention.

A predominant statistic demonstrating racial disparity in head and neck cancer is late stage at presentation in African-American compared to White patients [3,5,8,16,17]. Active screening by appropriately trained clinicians in areas of low socioeconomic status where healthcare is not readily available may help identify early stage disease before it is too late. Programs such as the HEALing Community Center and its outreach efforts to urban communities in metropolitan Atlanta are a prime example of screening programs that offer head and neck cancer care through experienced clinicians familiar with the culture and customs of the community. Screening should not just be limited to physicians and should include nurse practitioners, dentists, and oral-maxillofacial surgeons familiar with head and neck cancer [8], particularly those who are familiar with the community as they often illicit a positive response from members of lower socioeconomic areas.

In the Hispanic population, where data is scant, increasing the throughput of data collection and analysis will allow the head and neck clinician to identify racial disparities. Doing so will give the head and neck community the ability to focus care where it is needed most. In addition, applying to Hispanic and other minorities many of the lessons learned when examining

the established literature may improve overall patient care and quality of life, particularly in individuals who may not have access to care. This will allow head and neck clinicians to extend their expertise to a larger group of patients and to aid in decreasing late stage presentation, in turn decreasing morbidity and mortality.

**Keywords:** Head and neck cancer, socioeconomic, race, disparity, survival.

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