

# Oral and Dental Health Analysis within Minority Groups in Massachusetts

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## Background

Oral and dental health could affect anyone. People who have proper income could well take care of themselves. Disparities arise within minority groups. Oral and pharyngeal cancers are the most serious diseases in the oral cavity<sup>2</sup> among people of color. The survival rate of oral cancer for minority groups is much smaller than the whites. Most of the oral disease problems arise from having poor oral hygiene. Oral cancer is mostly diagnosed in people over the age of 45 even though cancer develops throughout a person's life time.

## Cause and Risk Factors<sup>3/4</sup>

- ❖ Tobacco use none-stop
- ❖ Alcohol abuse
- ❖ Age of individuals
- ❖ Poor diet
- ❖ Poor oral hygiene
- ❖ Racial treatment discrimination



Site of oral Cancer because of the enlargement of the throat.

## Symptoms<sup>4/5</sup>

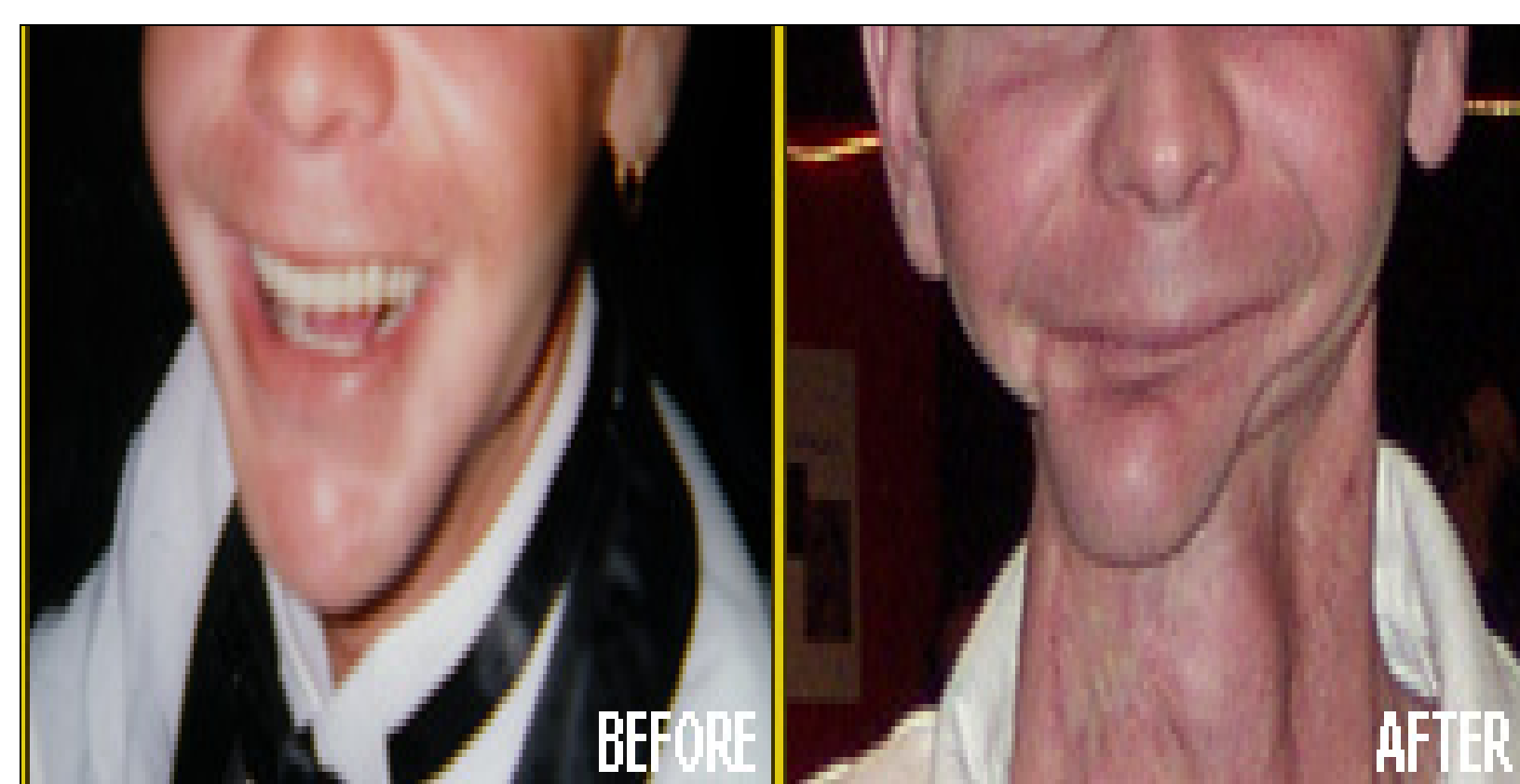
- Consistent bad breath
- Pain in the mouth that does not go away
- Thickening of the throat or tongue
- Swelling of the jaws
- Tooth decay



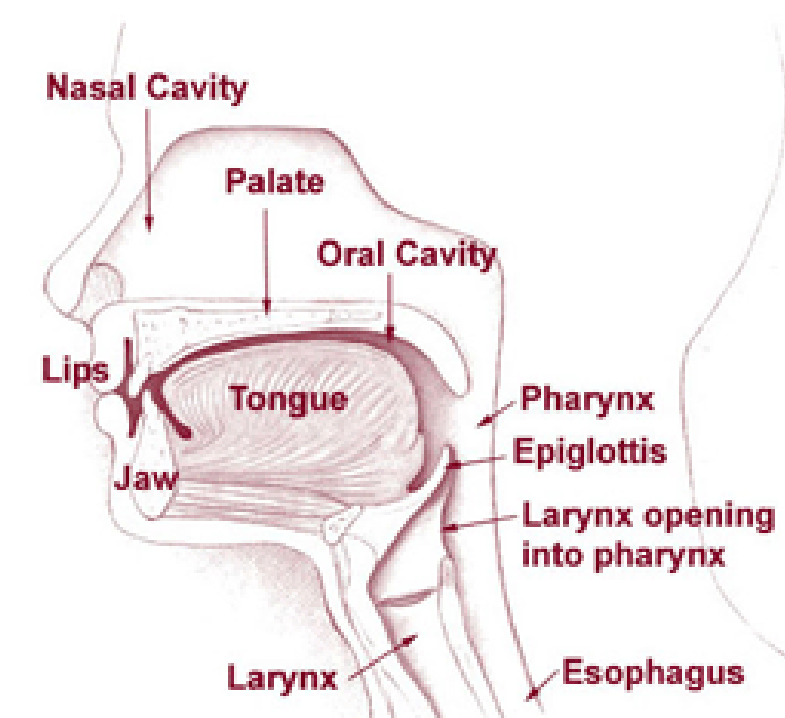
Swelling of the tongue resulted in oral cancer<sup>6</sup>.

## Prevention<sup>4/5</sup>

- Brushing teeth 2-3 times a day and flossing
- Regular visits to the dentist
- Fluoride in public water and toothpaste recommended to improve oral health.
- Quit smoking
- Limit drinking habits
- Eat properly/ Nutrition
- Prevention is better than cure and early detection saves lives.
- Dental sealants and surgery if needed



**Figure 1:** Anatomy of the oral cavity and pharynx. Cancers mostly develop on the soft areas within the oral cavity such as; tongue, lips, pharynx and the hard structures of the teeth. Cancer then spreads to the entire body if not detected early.<sup>1</sup>



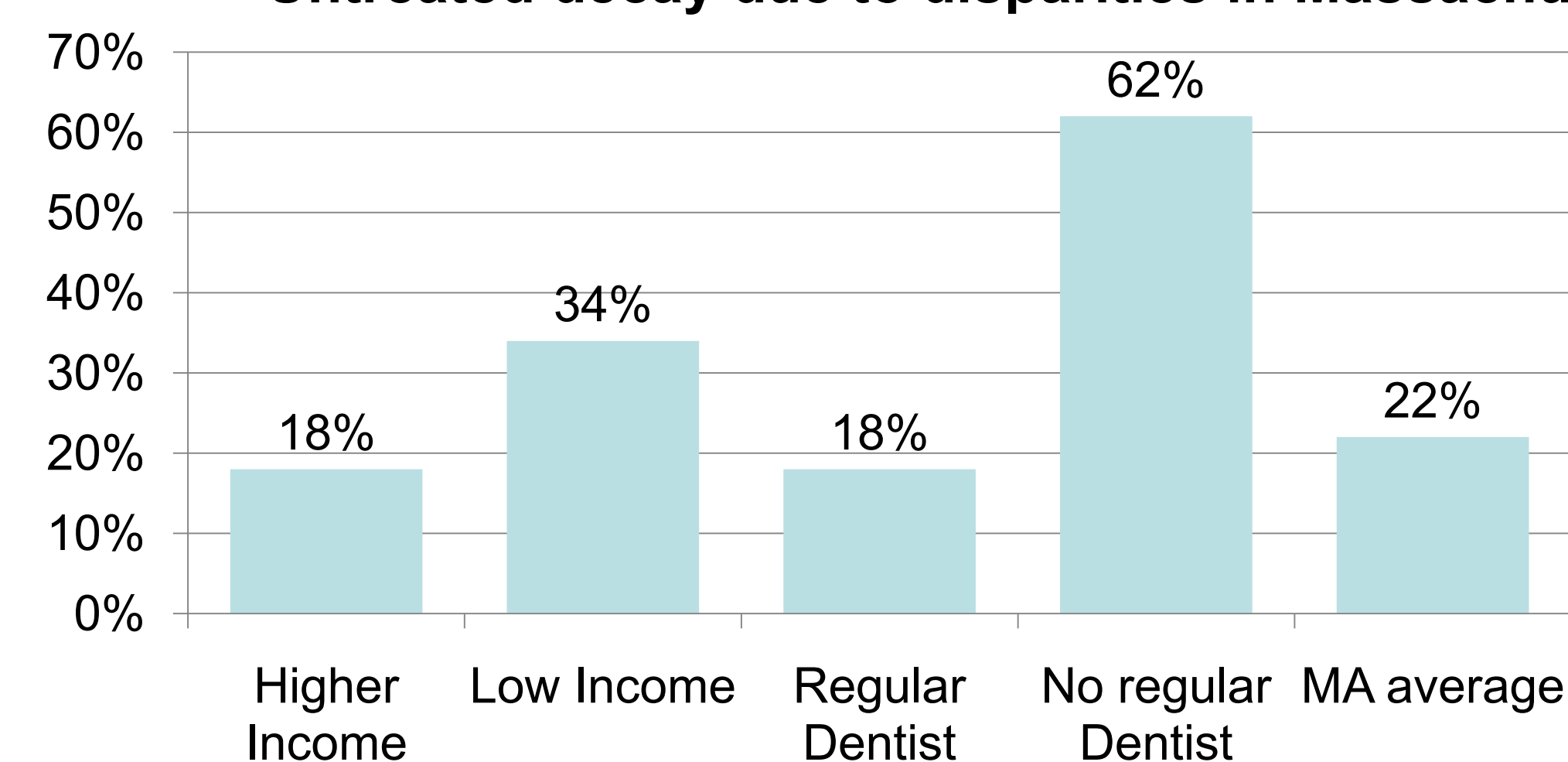
## Most common diseases that arise<sup>4/5</sup>

Periodontal (gum) disease develops affecting bones and tissues that hold teeth in place. Dental Caries is a disease that spoils the hard structure of the teeth. Oral and pharyngeal cancer comes from the damaged soft and hard tissues in the mouth. Both cancers are known to occur mostly in the elderly and disadvantaged individuals.

## Treatment of Oral Cancer<sup>7</sup>

Oral screening to make sure that a patient gets the right treatment. Surgery to remove the tumor and radiation treatment are the standard treatments. Chemotherapy (stops the cells from dividing) and hyperthermia therapy (a person's tissue is heated above normal temperature to kill off cancer cells) are in clinical trials.

## Untreated decay due to disparities in Massachusetts

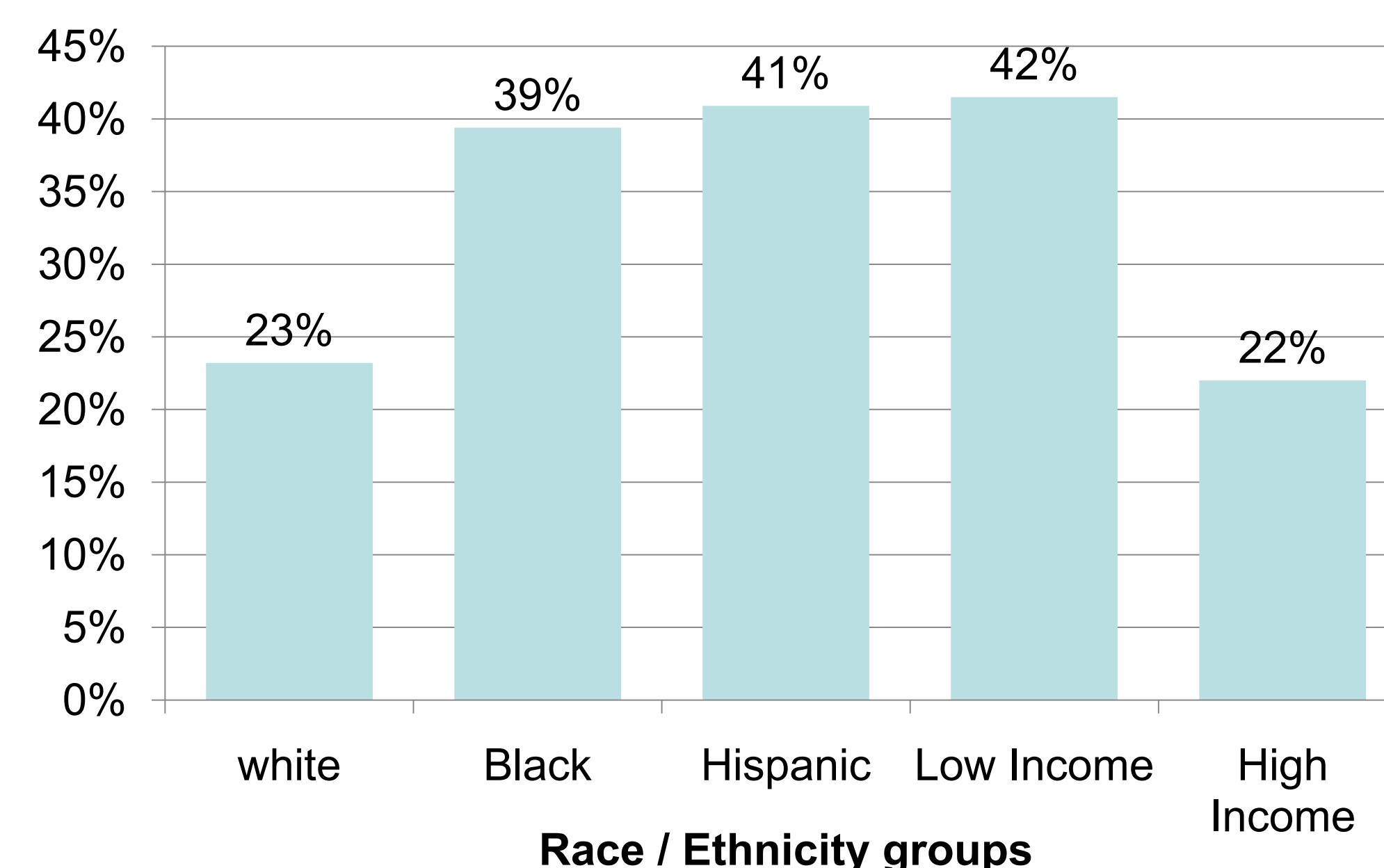


**Graph 1:** The data indicates that people who do not visit the dentist have high risk of developing tooth decay.<sup>4</sup>

## Disparities within Treatment practices<sup>2/3</sup>

Lack of education  
Socioeconomic status  
Race and Ethnicity plays a critical role  
Poor prognosis  
Loss of dental coverage  
Inadequate oral care

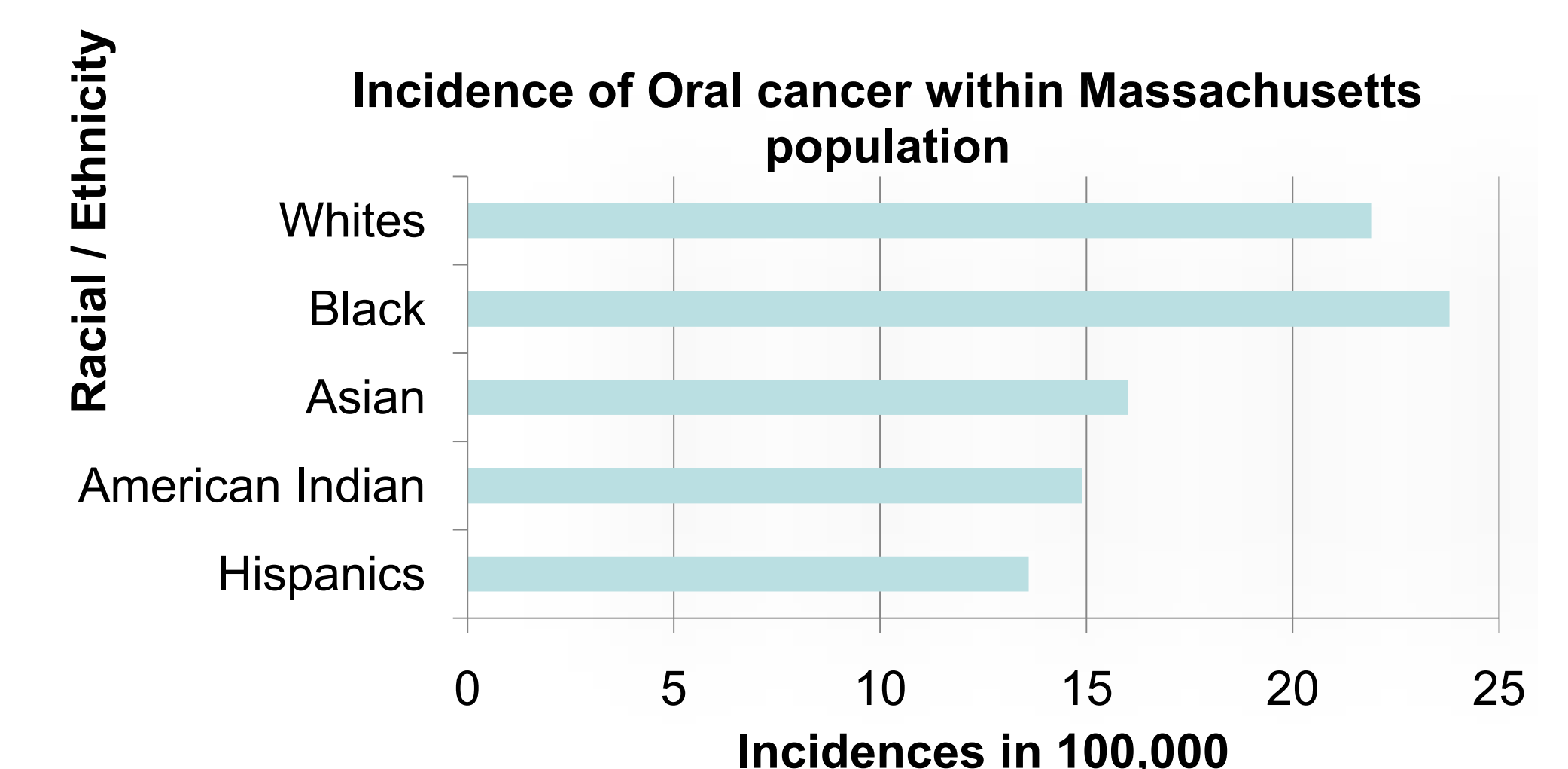
## Disparities among: Racial, Ethnic and Socioeconomic groups



**Graph 2.** The number of people who have the means that leads to good health. The population groups is compared to the amount of income within Massachusetts<sup>4</sup>

## Statistical data<sup>2/5</sup>

Current data says that 5 year survival rate for Whites is 56% and blacks is 34%. African American and Mexican American have two times the amount of untreated decay than whites. Low income families were more inclined to have increased number of oral health diseases. Old people from the racial background are more at risk. The studies suggest that oral cancer and pharyngeal cancer ranks number 6 of all cancers in males. While in females, it is ranked number 14.



**Graph 3.** Data analysis from the Massachusetts population based on the ethnic background.<sup>2</sup>

## Barriers affecting proper treatment<sup>3</sup>

- High demand for dental services,
- Lack of knowledge,
- Racial discrimination,
- Family size,
- Insurance coverage,
- Health history, ethnicity and age.

## Summary

• Everyone should have access to oral health services. Institutions need to provide materials in poor neighborhood: i.e. fresh water with fluoride, grocery stores with proper nutrition. Educate and provide services for those who do not know how to get help. Oral health is easily curable if only people had services in place to help themselves.

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