The year of 2020 and the ensuing years of 2021 and 2022 have been very insightful to the health care status of our country and the capabilities of providing care within our dental profession in many ways. The early deaths of our elderly population at nursing homes and other assisted living facilities have shown us the deficiencies in caring for this population. More than 75.5% of the deaths that occurred during the pandemic were those patients in the age group of 65 and over. I am proposing a perspective that will encourage us to re-evaluate how we identify, train, and prepare a pool of health care providers to help alleviate this problem in the future.

According to the 2010 Census, the US population 65 and older was the largest in terms of size and percent of the population. The group grew at a faster rate than the total population between 2000 and 2010. The 2010 Census determined that there were 40.3 million people 65 and older on April 1, 2010, increasing by 5.3 million since the 2000 Census when this population numbered 35.0 million. The population of those 65 and older grew at 15.1 percent while the total population grew at 9.7 percent. More so according to the US Administration on Aging, the population of Americans older than 65 years is expected to double to about 71 million by 2040. (Speed 2015-quality Oral Health Care for the elderly population: an academic and patient awareness perspective-HSOA Journal of Gerontology and Geriatric medicine) [1].

As we move into another decade, we find the numbers of the US population 65 and older has increased significantly. In 2019 the population age 65 and over was 54 million, an increase of 14 million from the 2010 census. It expected that this number will reach 80 million by the year 2040 and 94 million by the year 2060. The population grew at a rate of 16% in 2019 compared to 15% in 2010. That rate is forecast to be an increase of 21.6% by 2040. The population of 85 and older is projected to more than double from 6.6 million in 2019 to 14.4 million in 2040 (a 118% increase). 2020 Profile of Older Americans May 2021 US Department of Health and Human Services [2].

Academic papers have noted that the dental needs of these patients have increased given that more individuals are keeping their teeth much longer with much more involved dental restorative needs. Thru conversation with peers, general dentists are seeing an increase in dental cosmetic, social and functional expectations of this population. In that it is not unusual for a 70-80-year-old patient to request comprehensive restorative treatment plans options with the expectation that they will need their teeth for many more years. While conversely, the population of dental professionals willing and skillful to provide this level of specialized dentistry is limited and at the very least the number of available dental providers to perform this work is unclear.

In fact, a recent review of dental specialists as identify by the US Dental School programs does not include Geriatric dentistry as a specialty. Paralleling this is the resultant workforce of available dentists trained for this consistently changing clinical and technical work. To provide quality oral care to the elderly population we must first identify them as a priority group that needs specialized oral health care. This declaration will lead to the establishment of guideposts for educational and practical outcomes generally and specifically for the establishment of dental training facilities designed to treat these patients.

Withstanding this formal identification of a population in need, a systematic academic and patient – awareness process of addressing this challenge should include dental school admissions programs establishing criteria that will help create a pool of applicants with a demonstrated commitment and thus more likely to work with the elderly population. The establishment of a Geriatric dentistry core curriculum that focus on didactic and chairside training of students seems like a reasonable solution, the proper avenue to address this challenge is to develop appropriate and formal standards within our educational institutions. These programs should specifically be designed to train current students as well as be a reliable resource of training for all practicing general dentists to become clinically competent to serve these patients. These clinical standards should include not only upgraded clinical technique and procedures for establishing and maintaining a quality, functioning and healthy oral environment, restoring existing dental restorations or aggressive root caries treatment and management but also exploring progressive treatment plans that will properly serve these patients. These
upgraded standards developed with the oversight of our National Dental Accreditation body should be embraced by organized dental organizations such as our national and local dental societies.

**Racial and Ethnic Populations**

There are several reasons we must consider why we must diversify our profession. The ethnic and racial makeup will increase significantly along with an increase in a population of elderly patients over 65. According to a report by the ADA Health Policy Institute in February 2021, the dentist workforce compared to the US population consists of (use Graph from Health Policy Institute paper) 18% Asian (US population 5.6%), Blacks 3.8% (US population 12.4%), Hispanic 3.5% (18.4%), White 70% (60% US population) and other 2.2% (3.6%) [3].

Knowledge of the racial and ethnic make-up of the US population is critical to establishing our approach to providing dental care for these populations. It has been widely researched and referenced that minority patients are most likely to inquire and accept medical, dental and other health care from those of their racial and ethnic groups. Given that fact, we must understand that the populations of these racial and ethnic groups increased from 7.8 million in 2009 (20% of older Americans) to 12.9 million in 2019. This projection of racial and ethnic minority populations is predicted to increase to by 29% by 2040 which represents a 115% increase. African Americans and Hispanics are disproportionally in their numbers within the population compared to the numbers of dentists available to provide care for them. This is true in the medical area as well. The pandemic demonstrated that deaths among elderly populations were higher for those age 65 and over with a breakdown of 65-74 years (22.2% deaths), age 75-84 (26% deaths) and 85 and over (27.3% deaths. This represents more than 75.5% of all the deaths in the US from COVID 19. Many of these patients lived alone and had other underlining health issues. The minority populations need health care providers that are willing and dedicated to providing services for them) [4].

**The Economic Factor**

Even though a 65-year-old individual has an average life expectancy of more than an additional 19.6 years (20.8 for women and 18.2 years for men). The income of these individuals does not meet the standards for them to acquire adequate health care. Thus, many are placed in facilities that are lacking the staff and services which they need, leading to the crisis of 2020. The lack of Black and brown dentists, physicians, nurses, counselors and other clinical decision-makers and professional providers of care is a detrimental to patient care. Having health providers that are similar in cultural exchanges and capable of providing familiar modes of communication during this stage of their life will be immeasurable. The resultant medical and social impact will provide a greater quality of life for our elders at a time that is most precious to them. This is information is significantly important when stats from deaths of Black and brown populations were shown to be disproportionally higher than for whites for COVID 19 [5].

**Process and Recommendations for Change**

The process to increase the number of minority health care providers should began early in an individual's life. Thus, we must identify individuals most likely to want to serve these patients, as dentists we should become more involved in those underserved communities to help inspire students of color to become interested in the health profession - this process may begin by volunteering in the schools and community centers wherein respectful and trusted relations can develop. Many of my white colleagues/dentists have received mentoring from family dentists’ members such as mothers, fathers, uncles, aunts, and other relatives as well. However most Black, Hispanic, Native Americans and Pacific Islanders do not have these role models and mentors in their lives.

Another process to increase the number of minority dentists is by dentists becoming more involved in the admissions process of the dental schools. Particularly, the public dental schools wherein we have a personal stake to ensure that these schools are meeting the requirements of providing services to all populations.

**Community services events and organizations such as the Community Health Professions Academy within dental schools provides wonderful opportunities for dentists or health professionals to meet with young students and by example encourage them to consider the health field - specifically those areas of Geriatrics. Our elderly populations deserve nothing less than health professionals taking steps to ensure their access to care and quality of life is available to them when it is most needed. Our health system administrators, leaders and providers should closely review the literature and then evaluate the impact of a lack of health providers available in general and minority providers in particularly to care for our seniors during the years of 2020 and 2021. Without doing this work and taking active steps in creating a stream of individuals with a compassion to care for our elderly population we are most certain to see a repeat of lost of lives and at the very least the creation of a structure of less than the optimum health care. The resultant of which is a far distance from the care that we all seek and deserve.

## References

3. ADA Health Policy Institute 2021.
4. CDC stats 2022.
5. Race Equity and Health Policy.

## Citation: