Hennepin Health

2020 COVID-19 Racial and Ethnic Disparities

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Focus Study Questions

1. Among Hennepin Health members, are there disparities among any racial, ethnic or language groups in the occurrence of:

    a. The diagnosis of COVID-19,

    b. Inpatient treatment of COVID-19, or

    c. Death from COVID-19?

2. How do the rates of diagnosis, treatment and death among Hennepin Health members compare to the rates among racial and ethnic groups in Minnesota and the United States (US)?

3. What interventions to address these disparities are showing promise or effectiveness?

Rationale

The COVID-19 pandemic presented Hennepin County and the world with public health and healthcare challenges unlike any others experienced in the past 100 years. Over 100,000 cases have been identified in Hennepin County, and over 6,000 of these people have been hospitalized. Over 1,600 people have died.[1] Early in the COVID-19 pandemic, studies showed that some racial and ethnic groups were more likely to test positive for COVID-19, more likely to require hospitalization for the disease, and more likely to die from it.[2] [3] [4] This focus study was established to monitor racial and ethnic patterns of COVID-19 testing, hospitalization and death in the Hennepin Health population.

Benefits expected to be gained by conducting the study

By conducting this study, Hennepin Health expects to understand racial and ethnic disparities related to COVID-19 and to take appropriate steps to address those disparities.

Study methodology

This study is based on Hennepin Health claims with dates of service in 2020, that were received by 3/24/2021. The claims of all members were examined, so there was no sampling, and therefore no sampling methodology. The key metrics for the study are defined below:

- Diagnosis of COVID-19: A member was considered to have a diagnosis of COVID-19 if that member had an inpatient or outpatient claim with a COVID-19 diagnosis code (B97.29 or U07.1) as one of the first 20 diagnosis codes.
- Hospitalization for COVID-19: All inpatient claims with COVID-19 as one of the first 20 diagnoses were defined as COVID-19 admissions.
- Deaths from COVID-19: Deceased members are those who have a member event code of death and have had a claim with B97.29 or U07.1, as one of the first 20 diagnosis codes.
- Race and ethnicity: The DHS enrollment data files were used to identify the race and ethnicity (Hispanic vs. non-Hispanic) for each member, when available.

Results

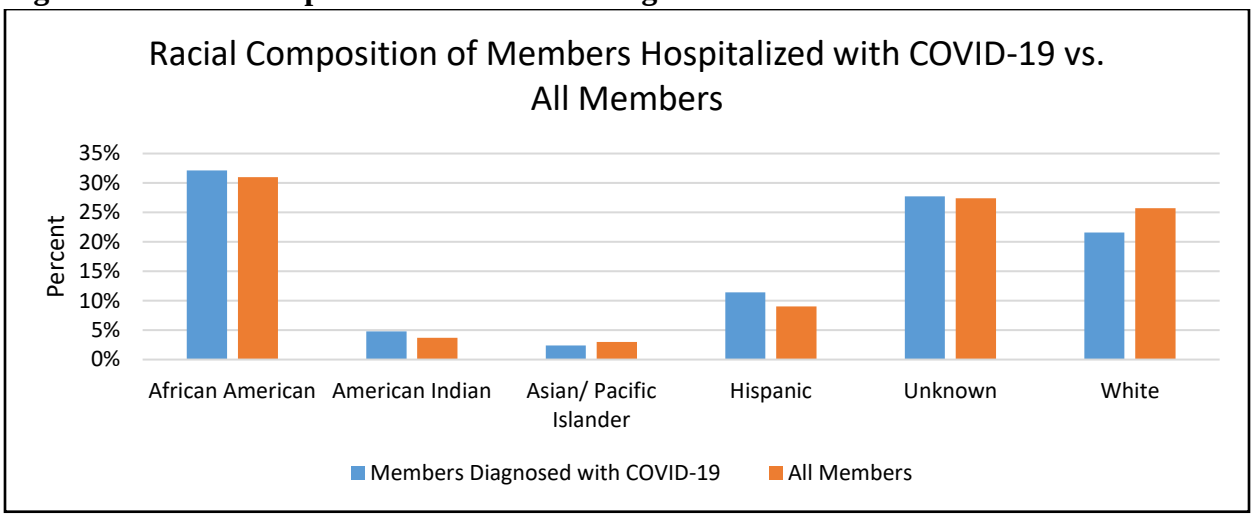
1. COVID-19 Diagnosis

During the 2020 calendar year, 2,021 Hennepin Health members received a diagnosis of COVID-19. As shown in Table 1, the highest number of members with this diagnosis were African American, followed by the "Unable to Determine" category, then Whites, Hispanics, American Indians and Asian and Pacific Islanders. Table I also includes the proportion of the COVID-19 positive members in each racial category. For comparison purposes, the racial make-up of all Hennepin Health members is also shown. Finally, the difference between these proportions is shown. A positive number in the final column indicates that for that racial group, there's a higher number of members diagnosed with COVID-19 than would be predicted by the racial make-up of the entire population. African Americans, American Indians, and Hispanics are over-represented in the COVID-19 population. Asian and Pacific Islanders and Whites have a negative number in the last column, indicating they are relatively underrepresented in the COVID-19 population. This same data is shown graphically in Figure 1. This figure shows small disparities in diagnosis of COVID-19 for most groups, except for Whites, who are underrepresented in the COVID-19 population and Hispanics, who are overrepresented.

Table 1. Racial Composition of Members Diagnosed with COVID-19 vs. All Members

Race/Ethnicity	Number diagnosed with COVID-19	Proportion of the diagnosed population	Proportion of all Hennepin Health members	Difference
African American	649	32.1%	31.0%	1.1%
American Indian	97	4.8%	3.7%	1.1%
Asian/Pacific Islander	49	2.4%	3.0%	-0.6%
Hispanic	230	11.4%	9.0%	2.4%
Unable to determine	560	27.7%	27.4%	0.3%
White	436	21.6%	25.7%	-4.1%

Figure 1. Racial Composition of Members Diagnosed with COVID-19 versus All Members



Hennepin Health members also demonstrated disparities in COVID-19 diagnosis based on language preferences. English is the preferred language of 93.9% of all members. Spanish is the preferred language of 3.6%, and 1.1% prefer Somali. Spanish speakers made up 7.0% of the members with a diagnosis of COVID-19, demonstrating more of the disease in this population, similar to the increase seen in Hispanics. English speakers had slightly lower than expected representation in the COVID-19 group at 90.0%. Somali speakers were 1.1% of the COVID-19 group, showing no disparity.

2. *COVID-19 Admissions*

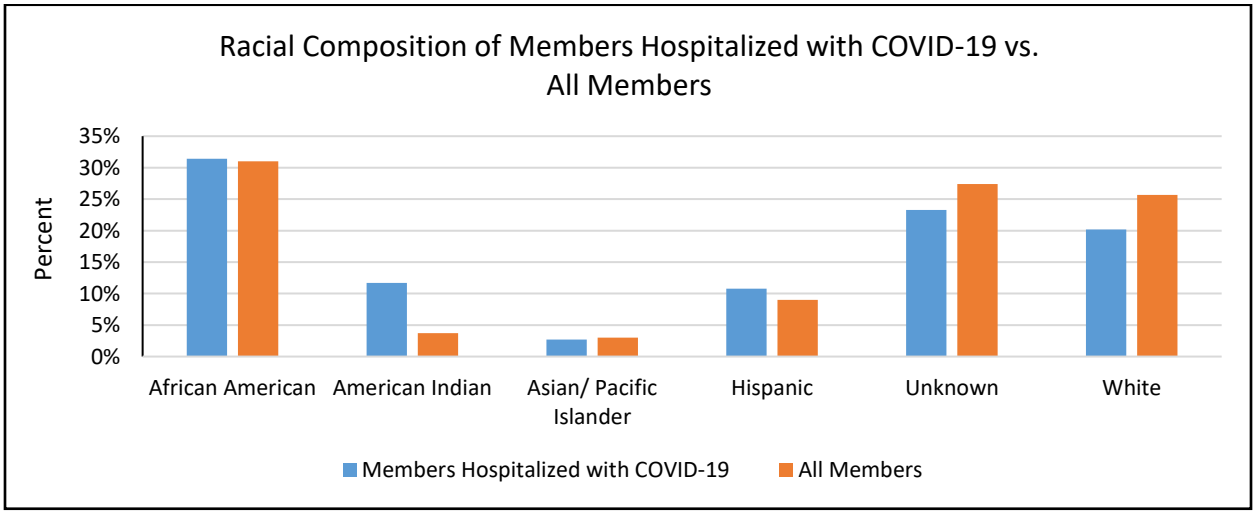
There were 223 hospital admissions related to COVID-19 during 2020. Table 2 and Figure 2 show the racial and ethnic composition of the members who were admitted, in comparison to the

racial and ethnic composition of the entire Hennepin Health population. The largest disparity occurred among the American Indian population. Members of this population make up 3.7% of the Hennepin Health population but comprised 11.7% of the population of members who were hospitalized. Whites were underrepresented in the hospitalized group.

Table 2. Racial Composition of Members Hospitalized with COVID-19 vs. All Members

Race/Ethnicity	Number diagnosed with COVID-19	Proportion of the diagnosed population	Proportion of all Hennepin Health members	Difference
African American	70	31.4%	31.0%	0.4%
American Indian	26	11.7%	3.7%	8.0%
Asian/Pacific Islander	6	2.7%	3.0%	-0.3%
Hispanic	24	10.8%	9.0%	1.8%
Unable to determine	52	23.3%	27.4%	-4.1%
White	45	20.2%	25.7%	-5.5%

Figure 2: Racial Composition of Members Hospitalized with COVID-19 versus All Members



3. COVID-19 Deaths

In 2020, 19 Hennepin Health members with a diagnosis of COVID-19 died. Because this is such a small number, conclusions about racial and ethnic disparities shouldn't be made from these

data. For information purposes only, the data is shown in Figure 3. Whites and American Indians make up a larger than expected portions of the population that died. African Americans have a lower than expected representation in this group.

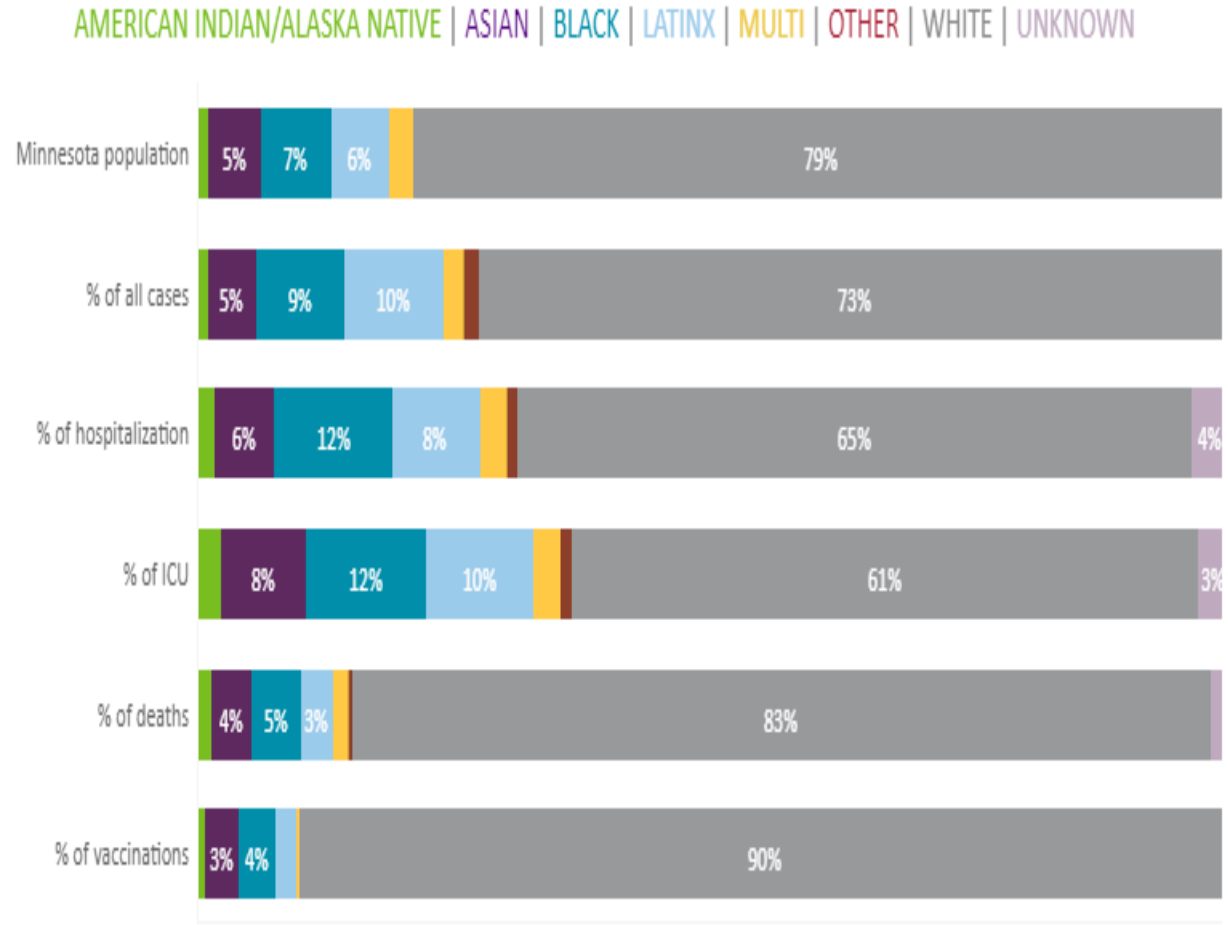
Table 3. Racial Composition of Deceased Members with COVID-19 vs. All Members

Race/Ethnicity	Number diagnosed with COVID-19	Proportion of the diagnosed population	Proportion of all Hennepin Health members	Difference
African American	5	26.3%	31.0%	-4.7%
American Indian	2	10.5%	3.7%	6.8%
Asian/Pacific Islander	0	0.0%	0.0%	0.0%
Hispanic	0	0.0%	0.0%	0.0%
Unable to determine	5	26.3%	27.4%	-1.1%
White	7	36.8%	25.7%	11.1%

4. Comparison to State and National statistics

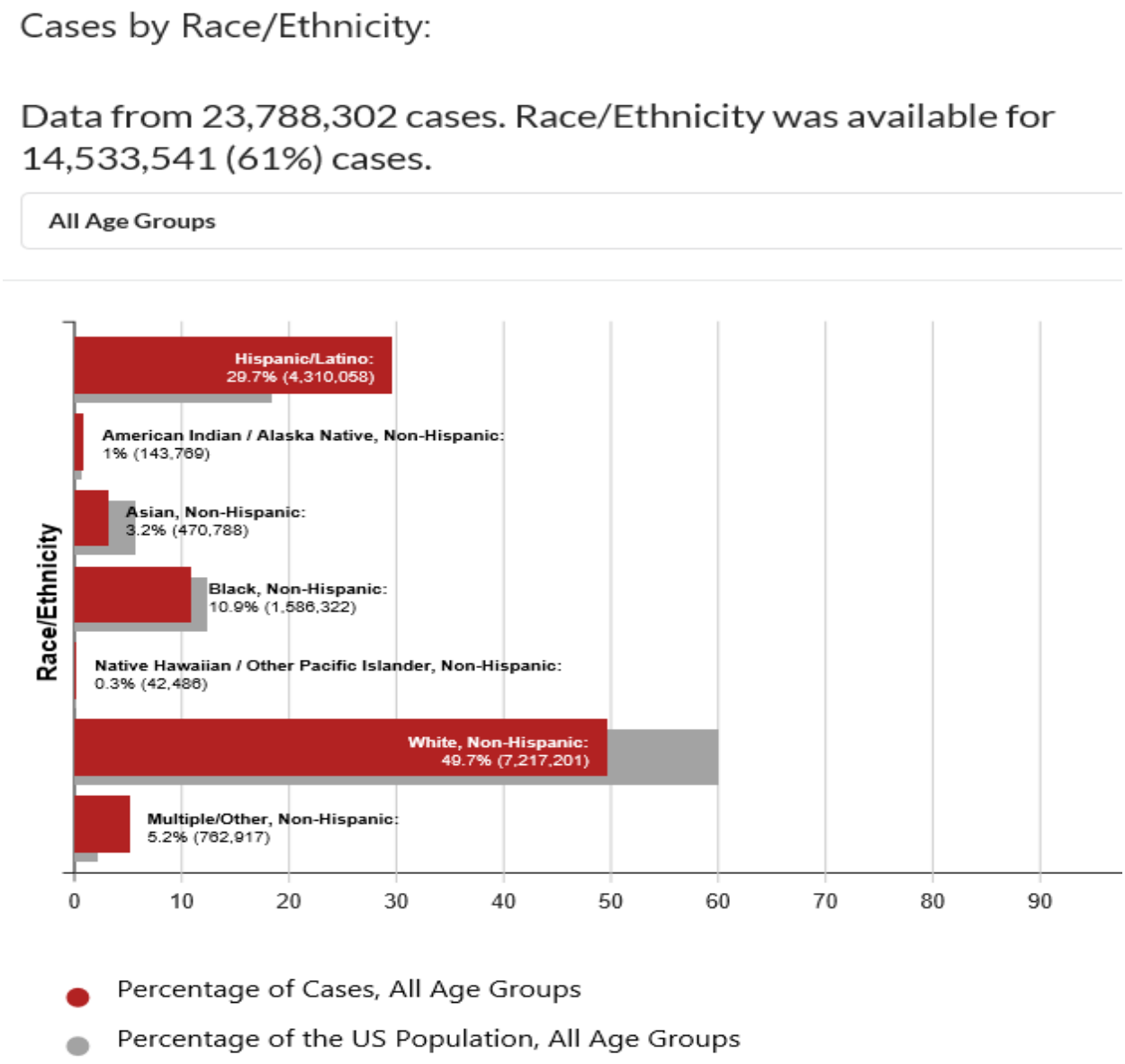
The racial ethnic composition of the Hennepin Health population is very different from the population of Minnesota and the US. In addition, the data source (claims data) and the metrics used in this focus study are different from the data sources and metrics used in reporting COVID-19 information at the state and national level. In spite of these differences, there are some similarities in the conclusions of this study and some Minnesota reporting. Figure 3 shows data from the Minnesota Department of Health that compares the racial composition of the state compared to the composition of state residents who test positive for COVID-19, are admitted with the illness and who die from this disease. Similar to Hennepin Health, Minnesota has seen a higher than expected proportion of African American and Hispanics in the population of people testing positive for COVID-19 as well as in the population of people admitted with this disease.

Figure 3. Summary of COVID-Positive Cases, Hospitalization, ICU, Deaths and Vaccinations by Race/Ethnicity with State of Minnesota Comparison[5]



As shown in Figure 4, national data on COVID-19 cases also shows some similarity to Hennepin Health data. Hispanics were more likely to be among the COVID-19 cases, while whites were less likely.[6]

Figure 4. Race and ethnicity of COVID-19 cases in the US.



Recommendations

This focus study identified racial disparities in COVID-19 diagnosis and hospital admission in 2020. African Americans, American Indians, and Hispanics all had disparities in both COVID-19 diagnosis and admissions.

The Center for Disease Control has identified possible causes of disparities for COVID-19, including factors related to discrimination, healthcare access and utilization, occupation, education, wealth gaps, and housing.[7] Another author identified the increased prevalence of risk

factors for serious COVID-19 disease, such as obesity, diabetes, cardiovascular and pulmonary disease among communities of color. This author suggested that renewed effort to address these conditions in culturally appropriate ways is a way to help reduce disparities in this pandemic as well as future epidemics.[8] Still other authors proposed three key components of a strategy to eliminate racial and economic disparities in health that were exacerbated by COVID-19, described below.

1. Expand access to health care, especially for minority, low-income, and undocumented groups, through an expansion of Medicaid eligibility.
2. Establish equitable care models. This tactic entails the establishment of multidisciplinary teams that build culturally appropriate communication and outreach practices. It also includes use of free technology to expand remote access to care and the use of trusted community voices to promote vaccination.
3. Address social determinates of health. This tactic includes actions that clinicians can take such as screening for social needs such as housing, food and legal assistance. It also includes policy changes, such as the expansion of unemployment benefits to provide sufficient economic resources.[9]

Finally, the Centers for Disease control made the following recommendation for decreasing COVID-19 disparities:

> "Community- and faith-based organizations, employers, healthcare systems and providers, public health agencies, policy makers, and others all have a part in helping to promote fair access to health. To prevent the spread of COVID-19, we must work together to ensure that people have resources to maintain and manage their physical and mental health, including easy access to information, affordable testing, and medical and mental health care. We need programs and practices that fit the communities where racial and minority groups live, learn, work, play, and worship."[7]

Many of the diverse recommendations describe above have been at least partially accomplished during the pandemic by Hennepin Health, its provider partners, and the Minnesota Department of Human Services (DHS). Access to care has been expanded by the DHS decision to maintain

members' eligibility for Medicaid during the pandemic. Hennepin Health has allowed 90-day refills of medications during the peacetime emergency. With financial and other support from Hennepin Health, Northpoint Health and Wellness and Hennepin Healthcare have continued to refine and expand equitable health care models that address the needs of their diverse patient populations. The entire Hennepin Health Accountable Health Model has made social determinates of health a cornerstone of our collective work for many years. During the pandemic Hennepin Health team members played leadership roles in establishing safe housing for high-risk individuals and for homeless individuals that needed to be quarantined. Now that COVID-19 vaccinations are available, Hennepin Health is coordinating efforts with Hennepin County Public Health and provider organizations to increase vaccination rates among our diverse member population as well as other County residents.

Next steps

Going forward, three activities are recommended.

1. Increase COVID-19 vaccination in communities of color. This will be accomplished through communications that promote vaccination, coordination with Hennepin County Public Health and provider partners, and collaboration with diverse communities and community leaders. The communications efforts will include promotion of vaccines through the Hennepin Health newsletter, Facebook and Twitter, as well as through telephone hold messages and direct outreach to members.

2. Continue to build equitable health care models that can address the conditions that increase the risk of serious COVID-19 infections, such as diabetes, heart disease and obesity. This will be accomplished through the diabetes performance improvement project, the healthy start performance improvement project and the risk corridor project.

3. Monitor the progress of these efforts by routinely conducting analyses showing the racial composition of Hennepin Health member populations that are vaccinated, diagnosed and admitted with COVID-19. Track health plan progress in reducing

racial and ethnic disparities in other key health indicators included in the risk corridor project.

[1] Hennepin County COVID-19 public dashboard. Accessed 3/31/2021 at: https://app.powerbigov.us/view?r=eyJrIjoiMjFhMmRmZGQtMDMxOS00YjlhLWJkMmEtM2E3Y2JmODRiMmU1Iiwid CI6IjhhZWZkZjlmLTg3ODAtNDZiZi04ZmI3LTRjOTI0NjUzYThiZSJ9

[2] Hooper MW, Napoles MA et al. COVID-19 and Racial/Ethnic Disparities. JAMA 323(24):2466-7.

[3] Williams DR, Coopere LA. COVID-19 and Health Equity – A new Kind of "Herd Immunity". JAMA 323(24): 2478-80.

[4] Price-Haywood EG, Burton J et al. Hospitalization and Mortality among Black Patients and White Patients with COVID-19. N Engl J Med 382(26): 2534-43.

[5] Minnesota Department of Health. COVID-19 Data by Race/Ethnicity. Accessed 4/1/2021 at https://mn.gov/covid19/data/data-by-race-ethnicity/index.jsp

[6] Centers for Disease Control. Demographic Trends of COVID-19 cases and deaths in the US reported to CDC. Accessed on 4/2/2021 at https://covid.cdc.gov/covid-data-tracker/index.html#demographics

[7] Centers for Disease Control. Health Equity Considerations and Racial and Ethnic Minority Groups. Accessed on 4/2/2021 at https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/race-ethnicity.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fneed-extra-precautions%2Fracial-ethnic-minorities.html

[8] Alcendor DJ. Racial Disparities-Associated COVID-19 Mortality among Minority Populations in the US. Journal of Clinical Medicine 2020, 9(8): 2442.

[9] Lopez L, Hart LH et al. Racial and Ethnic Health Disparities Related to COVID-19. JAMA 2021, published online January 22, 2021.

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