

Impact of COVID-19 on Health Disparities in the United States - A Preliminary Study

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Abstract

Health disparities are the differences in health outcomes and health status among people belonging to different groups. This means that people with low socioeconomic status, old age, racial and ethnic minorities, who are often those with limited access to healthcare may often face a higher disease burden and experience worse health outcomes. The current pandemic of Coronavirus 2019 (COVID-19), caused by the novel coronavirus SARS-CoV-2, provides a painful reminder of why inequities harm all of us as the devastating impact of the pandemic is apparent. This paper examines the differences in and possible cause of the rates of COVID infections, hospitalizations, ICU admissions and mortality rates across age, gender, race and Socioeconomic groups in the United States

Keywords: Health disparity, Covid-19, Community health, Health systems

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Introduction

Over the last few decades, widening disparities in health across racial and socioeconomic groups have spawned a slew of scientific research in a wide range of fields that has attempted to understand the causes of such health disparities. Margaret Whitehead concisely defined health disparities as "differences which are unnecessary and avoidable but, in addition, are also considered unfair and unjust" (Braveman, 2009). This means that people with low socioeconomic status, old age, racial and ethnic minorities, who are often those with limited access to healthcare may face a higher disease burden and experience worse health outcomes. The current pandemic of Coronavirus 2019 (COVID-19), caused by the novel coronavirus SARS-CoV-2, provides a painful reminder of why inequities harm all of us as the devastating impact of the pandemic is apparent, with nearly 8,484,597 confirmed cases and more than 225,698 deaths in the U.S. alone and growing (Worldometer, 2020). Before it reached the United States, many Americans were already experiencing poor health because of a lack of medical coverage and limited access to affordable healthcare (Solis & Franco-Paredes, 2020). In turn, the pandemic has exacerbated the existing health disparities stemming from structural vulnerabilities, including inadequate access to healthy food, housing and financial insecurity, discrimination, uncertain legal status, and others (Solis & Franco-Paredes, 2020). This global outbreak has, therefore, brought to renewed attention the many troublesome effects of health disparities in the U.S. that we have failed to address. One recent study has concluded that nearly 22% of U.S. counties which are disproportionately African American accounted for 52% of COVID-19 diagnoses and 58% of COVID-19 deaths nationally (Millett, T Jones, & Benkeser, 2020). With this global health crisis, there is an urgent need to start focusing on research that can help understand the reasons, reduce the disproportionate burden of COVID-19, and help alleviate health disparities.

This paper examines the interplay between existing disparities and COVID-19 in the rates of COVID infections, hospitalizations, ICU admissions and mortality rates across age, gender, race and Socioeconomic differences.

COVID-19 Exposing Health Disparities in the U.S.

Pandemics rarely affect all people in a uniform way. The COVID-19 pandemic has rapidly spread across the U.S. states and has severely impacted vulnerable populations including old age group, racial minority group and people with low socioeconomic status. Age is a significant risk factor for COVID-19 mortality, and a vast majority of the COVID-19 deaths in the U.S. have been among people older than 75 as people belonging to older age groups have various comorbidities and a weak immune system which makes them highly susceptible to developing lethal disease from the virus. The pandemic has also perpetuated an economic crisis with a substantial rise in unemployment rates that has further threatened health and social insecurity (Ahmed & Ahmed, 2020). Poor populations lacking access to health services in normal circumstances are left most vulnerable during times of crisis (Ahmed & Ahmed, 2020). Racial minorities have also been severely impacted. It has been observed that in many states the percentages of affected people who are African American are more than twice as high as the proportion of African American in the overall population (Selden & A. Berdahl, 2020).

The current pandemic has not only brought into limelight the existing inequalities within the society but may also exacerbate them.

Factors Leading to Health Disparities

Below are some of the factors that can have significant impacts on health status among various populations resulting in health disparities during COVID-19.

Age

Patient's age is an important factor in determining the course of COVID-19 illness. Previous epidemics such as Cholera, SARS etc., have often had a much more deleterious impact

on the younger segments of the population. However, in the current pandemic, it has been found that over 80% of hospitalizations because of COVID-19 are of those of adults over 65 years of age with a 23-fold greater risk of death (L. Mueller & S. McNamara , 2020). On the other hand, children appear to perhaps have a lower susceptibility to acquiring COVID-19 infection and certainly a lower probability of getting serious illness from it (L. Mueller & S. McNamara , 2020). The age dependent severity is demonstrated by higher disease burden in wealthier countries that have more aging population than under developed countries with limited healthcare resources but younger generation. Thus, the lower than expected number of cases detected in Africa (despite extensive trade and travel links with China) suggests that the young age structure may be of protecting those countries from high rates of severe and thus detectable cases (Beam Dowd & Andriano, 2020). The health disparities observed among elderly has led to detrimental effects on the health and longevity of older adults with COVID-19. This age group bears a higher burden of chronic diseases such as diabetes, hypertension, lung diseases and heart diseases, which increases their chances of acquiring severe illness from the virus resulting in hospitalization, and even ICU admissions which may progress to death (Coronavirus Disease 2019 (COVID-19), 2020). It has been found that 45% of U.S. adults between the age of 19 and 64 are inadequately insured and 44 million are underinsured as of 2018 leading to high co-pays and out-of-pocket costs (R. Collins & K. Bhupal, 2019). These individuals are at high-risk for contracting the disease and they may be less likely to seek care for early symptoms of COVID-19. This may facilitate the spread through whole populations making it worst for the older adults who have a higher risk of serious and even fatal outcomes.

According to CDC's MMWR report, as of March 16, 2020, a total of 4,226 COVID-19 cases in the United States had been reported to CDC, with multiple cases reported among older adults living in long-term care facilities (CDC, Health Equity Considerations and Racial and Ethnic Minority Groups, 2020). Overall, 31% of cases, 45% of hospitalizations, 53% of ICU admissions, and 80% of deaths associated with COVID-19 were among adults aged greater than or equal to 65 years with the highest percentage of severe outcomes among persons aged greater than or

equal to 85 years. In contrast, no ICU admissions or deaths were reported among persons aged less than or equal to 19 years (CDC, Health Equity Considerations and Racial and Ethnic Minority Groups, 2020).

Until more nuanced data is available, the concentration of mortality risk in old age remains one of the best tools to predict the burden of critical cases and produce more precise planning of availability of hospital beds, staff, and other resources (Beam Dowd & Andriano, 2020).

Gender

It has been observed that COVID-19 affects men more severely than women. In mid-February, the Chinese Center for Disease Control and Prevention analyzed data from 72,314 Covid-19 patients and reported that men in their sample were almost twice as likely to die as women. In the United States, as of June 2020, 57% of deaths caused by COVID-19 have been men. With the exception of Massachusetts, all states in the U.S. have reported higher mortality among men (Huckins, 2020). Many biological and social factors can cause the gender inequity some of which include high prevalence of hypertension and liver diseases among men, higher frequency of smoking which makes their lungs more susceptible to severe infection, weaker immune system etc. The life style factors that exacerbate men's risk are often also intertwined with race, ethnicity, geography, etc. (Healthline, 2020).

Collecting sex-disaggregated data is highly essential to understanding the risk factors for gender disparities that are being observed during the pandemic. Harvard's GenderSci Lab team created perhaps the largest centralized repository of sex-separated US Covid-19 data and publicly released a data tracker that assimilates that information, in the hope that scholars can unlock the mystery of why Covid-19 seems to kill more men (Huckins, 2020). However, as the state data is often inadequate, incomplete, and unreliable, it makes it difficult for researchers to identify both social and biological factors that are more likely to cause gender related inequities (Huckins, 2020). In a recent analysis of 26 states, it was observed that only half of

them reported sex as a variable (M. Griffith & Sharma, 2020). The data is highly essential in addressing underlying inequities and can help us improve overall response to the pandemic. As the COVID-19 pandemic unfolds, sex-disaggregated data can help guide clinical care and therapeutics and address questions such as whether older men with comorbidities require additional prevention, surveillance, or earlier intensive intervention than women or younger people or those without comorbidities (Sharma & Santos Volgman, 2020).

Race

Long-standing systemic health and social inequities have put many people from racial and ethnic minority groups at increased risk of getting sick and dying from COVID-19 (CDC, Health Equity Considerations and Racial and Ethnic Minority Groups, 2020). African American and Latino people have been disproportionately affected by the coronavirus in a widespread manner that spans the country, across counties in urban, suburban and rural areas, and across all age groups. In early April, Wisconsin and Michigan released data showing stark racial disparities in rates of COVID-19 cases and deaths (Chowkwanyun & L. Reed, 2020). In those states, many media outlets noted that the percentages of affected people who were African American were more than twice as high as the proportion of African American in the overall population (Chowkwanyun & L. Reed, 2020). Other states in the U.S. have also demonstrated a similar pattern suggesting an increased severity of the disease in individuals from racial minority. A variety of factors can increase their chances of acquiring the disease, hospitalization and progression to severe illness from COVID-19. These include living in crowded conditions, working in service jobs, taking public transportation, lack of access to protective gear at work, pre-existing health conditions, lack of access to health care and health insurance, inequities in access to education and low income (CDC, Health Equity Considerations and Racial and Ethnic Minority Groups, 2020). These factors contribute to higher rates of deaths from COVID-19 in areas where racial and ethnic minority groups live, learn, work, play, and worship (CDC, Health Equity Considerations and Racial and Ethnic Minority Groups, 2020). African American population in the U.S. also bear the burden of historic discrimination policies such as redlining

policies in housing that limited their ability to accumulate wealth through property ownership. Since wealth is a significant driver of health, this also increases their susceptibility to infection (Godoy, 2020). Latino people have also been infected at a higher rate compared with white people. According to the American Housing Survey, Latino people are twice as likely to reside in a crowded dwelling — less than 500 square feet per person — as white people which increases their susceptibility to the virus (Jr & Gebeloff, 2020). The CDC data also shows that Latino people between the ages of 40 and 59 have been infected at five times the rate of white people in the same age group (Jr & Gebeloff, 2020). A CDC MMWR report from COVID-NET catchment population included race and ethnicity data from 580 patients hospitalized with lab-confirmed COVID-19. It was found that 45% of individuals for whom race or ethnicity data was available were white, compared to 59% of individuals combined in all other groups; however, 33% of hospitalized patients were African American, compared to 18% in the COVID-NET catchment population, and 8% were Hispanic, compared to 14% in that population (CDC, Hospitalization Rates and Characteristics of Patients Hospitalized with Laboratory-Confirmed Coronavirus Disease 2019 — COVID-NET, 14 States, March 1–30, 2020, 2020).

The COVID-19 pandemic has impacted racial minority groups affecting every stage of their lives. This should be taken as an opportunity to address social and racial disparities by providing everyone equal access to healthcare.

Socioeconomic Status

Socioeconomic status in the U.S. is also inextricably linked to race and ethnicity (L. Rollston & Galea, 2020). People of color are disproportionately represented among people with lower income and less education, representing a racial and ethnic segregation (L. Rollston & Galea, 2020). Major socioeconomic factors that contribute to health disparities include income, education and occupation. People with higher education have a better understanding of the system and can easily process information. They have better economic conditions and can better interact with healthcare providers. Education has been called the most basic component of SES because of its influence on future occupational opportunities and earning potential

(Adler & Newman, 2020). Another factor that can also affect health is occupation as it can affect an individual's lifestyle, access to resources, exposure to psychological risks and physical hazards. People with lower income have limited access to healthcare, nutrition and housing facilities. Financially poorer people are often employed in occupations that do not provide opportunities to work from home (Non-decent housing and overcrowding). This includes but is not limited to supermarket and warehouse workers, those in certain forms of public transport and bus drivers, whose tragic deaths we have already witnessed. These individuals have unstable work conditions and incomes that can be highly impacted by COVID-19. Such financial uncertainty disproportionately harms the mental health of those in low SES groups and exacerbates their stress which can lead to a weaker immune system and increased susceptibility to a range of diseases (Patel & Nielsen, 2020). It has also been observed that people with low SES seek healthcare services at a more advanced stage of illness which also results in poor health outcomes (Algren & Ola Ekholm, 2018). Access to health care is also determined by a person's ability to use health services with ease, and having confidence that you will be treated with respect (Cookson & Propper, 2016). This can be hindered by language barriers, patients' attitudes toward healthcare providers and the behaviors and attitudes of healthcare professionals toward minority patients (Cookson & Propper, 2016).

Unlike other developed countries in the world, a large percentage of the population in the U.S. still lacks health insurance (27.5 million people as of 2018), a disproportionate number of whom are people of lower socioeconomic status and racial and ethnic minorities (Szczepura, 2005). This means that such individuals are unlikely to seek treatment through a primary care provider and delay access to emergency care. This delay may complicate efforts in tracking the spread of the infection and potentially increase exposure to others around them. It was found that New York state, with the highest income inequality, had a mortality rate of 51.7 deaths per 100,000. This is 125 times greater than Utah, the state with the lowest income inequality and which had a mortality of 0.41 per 100,000 at the end of the period studied (Oronce & Scannell, 2020).

It is high time that the government must set forth economic policies that are focused on reducing the financial and healthcare costs of the measures and solutions required to mitigate COVID-19.

Data Analysis

Data analysis was performed using 'COVID-19 Case Surveillance Public Use Data' (COVID-19 Case Surveillance Public Use Data, 2020) available on CDC's website, as of October 10, 2020. The COVID-19 case surveillance system database includes patient-level data reported to U.S. states and autonomous reporting entities, including New York City and the District of Columbia (D.C.), as well as U.S. territories and states (COVID-19 Case Surveillance Public Use Data, 2020). We performed analytics on this dataset and computed the total count and percentage of probable and lab confirmed cases, hospitalizations, ICU stays and deaths due to COVID-19 based on age, gender, race and socioeconomic status. Since CDC receives all public health data which is readily available for use by researchers in better understanding the outbreak, we used this data from CDC for our analysis. COVID-19 surveillance draws data from a combination of sources from existing influenza and viral respiratory disease surveillance, syndromic surveillance, case reporting, commercial lab reporting, ongoing research platforms, and other new systems designed to answer specific questions (Schaner, 2020). The data, however, does not show exact number of COVID-19 illnesses, hospitalizations and deaths because everyone who is infected does not get tested or seek medical care. Also, symptoms might be mild and may not appear immediately resulting in delayed reporting and testing. Johns Hopkins also have COVID-19 data which we did not use for our analysis since that data is used from various sources which do not always agree, and Johns Hopkins frequently updates the data on its website, which could result in higher case numbers than may be available from other sources (Kaholokula, A. Samoa, & E.S. Miyamoto, COVID-19 Special Column: COVID-19 Hits Native Hawaiian and Pacific Islander Communities the Hardest, 2020).

Age Inequities

Based on the data from CDC's website as of October, 2020 (COVID-19 Case Surveillance Public Use Data, 2020), it was found that the highest percentage of COVID-19 cases, 18.12%, were found in the age group of 20–29, whereas majority of hospitalizations were found in older age groups, reported to be 20.43% in the age group of 60–69, 18.56% in 70–79 and 18.35% in 80+. Among patients admitted to the ICU, 24.52% were between the age of 60 and 69, 20.10% between 70 and 79 and 13.76% were above 80. COVID-19 deaths were higher in the older age groups with 45.44% of the patients above the age of 80 and 24.49% in the age group of 70–79. Figures 1, 2, 3 and 4 show the graphical representation of percentages and table 1 shows both counts and percentages of cases, hospitalizations, ICU admissions and deaths based on gender.

Figure 1: Percentage of COVID-19 cases by age group

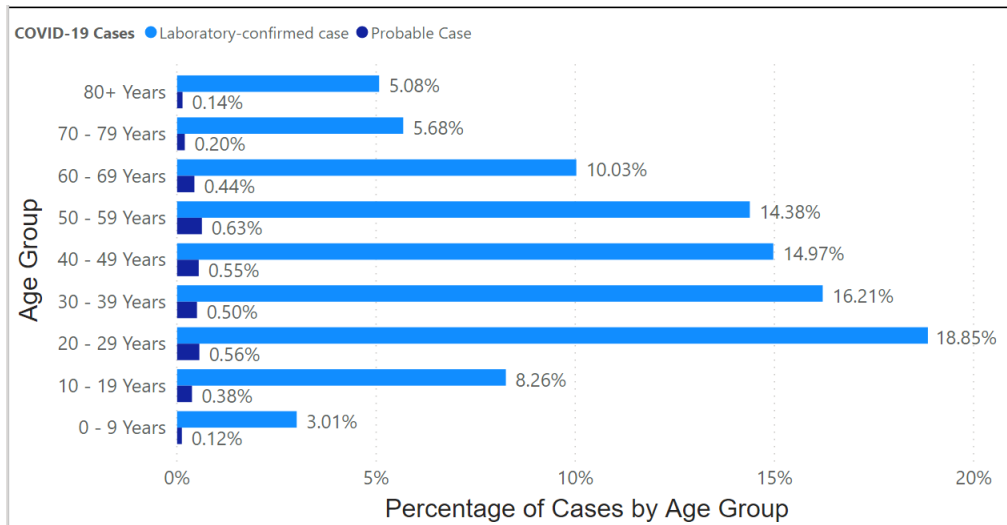


Figure 2: Percentage of COVID-19 hospitalizations by age group

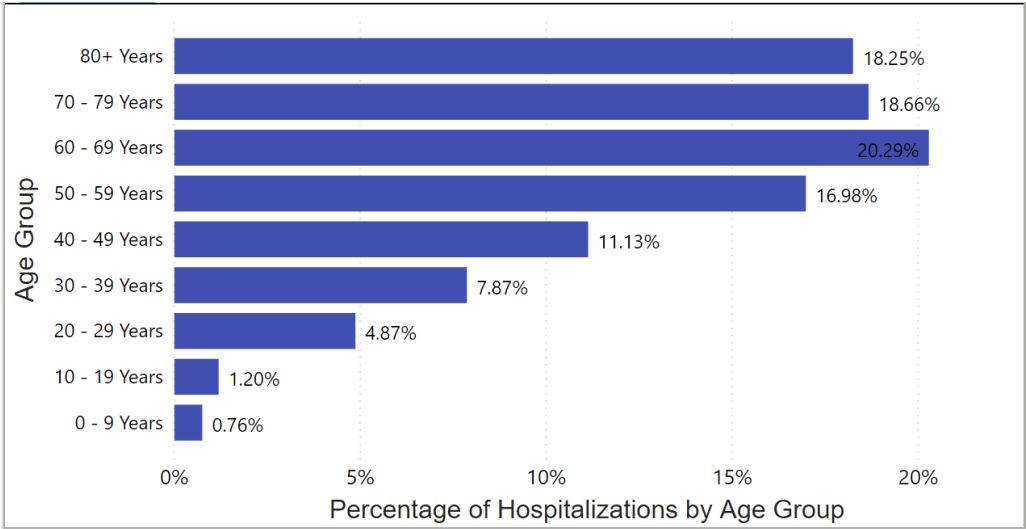
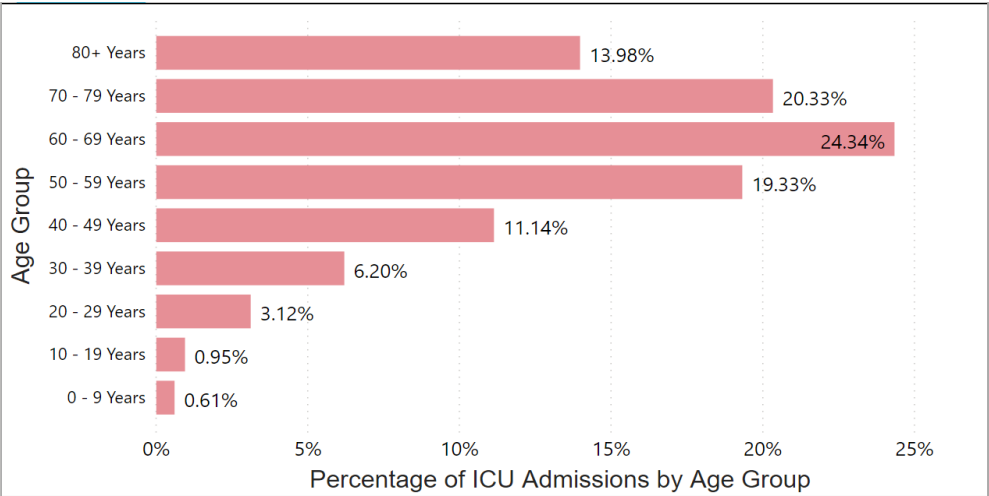


Figure 3: Percentage of COVID-19 ICU admissions by age group



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Figure 4: Percentage of COVID-19 deaths by age group

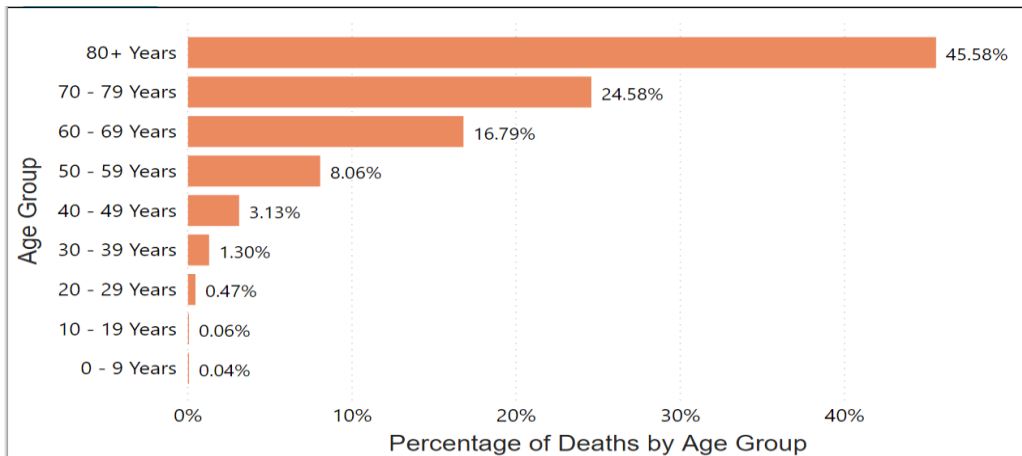


Table 1: Count and percentages of hospitalization, ICU admissions and deaths by age

| Age Group | Lab-confirmed Cases | Percent of Lab-confirmed Cases | Hospitalizations | Percent of Hospitalizations | ICU Admissions | Percent of ICU Admissions | Deaths | Percent of Deaths |
|---------------|---------------------|--------------------------------|------------------|-----------------------------|----------------|---------------------------|--------|-------------------|
| 80+ Years | 227,246 | 5.08% | 69233 | 18.25% | 7,073 | 13.98% | 62,164 | 45.58% |
| 70 - 79 Years | 254,304 | 5.68% | 70818 | 18.66% | 10,291 | 20.33% | 33,526 | 24.58% |
| 60 - 69 Years | 448,799 | 10.03% | 76966 | 20.29% | 12,319 | 24.34% | 22,900 | 16.79% |
| 50 - 59 Years | 643,723 | 14.38% | 64427 | 16.98% | 9,780 | 19.33% | 11,000 | 8.06% |
| 40 - 49 Years | 670,109 | 14.97% | 42219 | 11.13% | 5,637 | 11.14% | 4,263 | 3.13% |
| 30 - 39 Years | 725,600 | 16.21% | 29857 | 7.87% | 3,140 | 6.20% | 1,770 | 1.30% |
| 20 - 29 Years | 843,783 | 18.85% | 18488 | 4.87% | 1,578 | 3.12% | 637 | 0.47% |
| 10 - 19 Years | 369,617 | 8.26% | 4539 | 1.20% | 482 | 0.95% | 83 | 0.06% |
| 0 - 9 Years | 134,620 | 3.01% | 2871 | 0.76% | 308 | 0.61% | 49 | 0.04% |

It can be inferred from the above figures that the younger age group, especially those between 20-29, are more prone to acquiring COVID-19 infection. This is because they make up a significant percentage of workers in front-line jobs with higher potential for exposure to the

public (US Census, 2019). They are also less inclined to follow social distancing rules and are more drawn to large gatherings (US Census, 2019). These individuals have mild to no symptoms which can also result in asymptomatic spread of virus that can have a worst effect on vulnerable population. It is observed that the rate of hospitalizations and ICU admissions are higher in older age groups with the death rate being extremely high in those older than 80 years. Based on 2019 data, about 18.55 percent of the U.S. population fell into the 0-14 year category, 65.24 percent into the 15-64 age group and 16.21 percent of the population are over 65 years of age (Schaner, 2020). This shows that the older age groups are suffering severely as their overall percentage in the U.S. population is much lower. The severity of illness in this age group can possibly be explained by a weaker immune system and a higher prevalence of comorbid conditions that make them vulnerable to severe illness.

Gender Inequities

We inferred that a higher percentage of males have been impacted from COVID-19 as compared to females. 49.91% of females were found to have lab-confirmed COVID-19 than 46.28% of males. It was also found that 63.63% of those who were hospitalized and admitted to the ICU were men, whereas 36.3% of them were women. 53.75% of the deaths were in men as compared to 46.12% in women. Figures 5, 6, 7 and 8 show the graphical representation of percentages and table 2 show both counts and percentages of cases, hospitalizations, ICU admissions and deaths based on gender.

Figure 5: Percentage of cases by gender

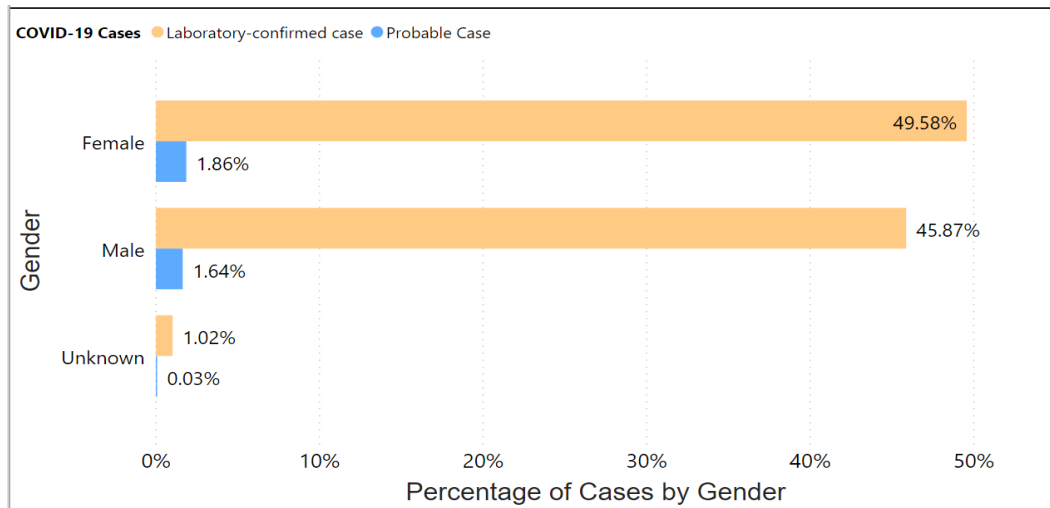


Figure 6: Percentage of COVID-19 hospitalizations by gender

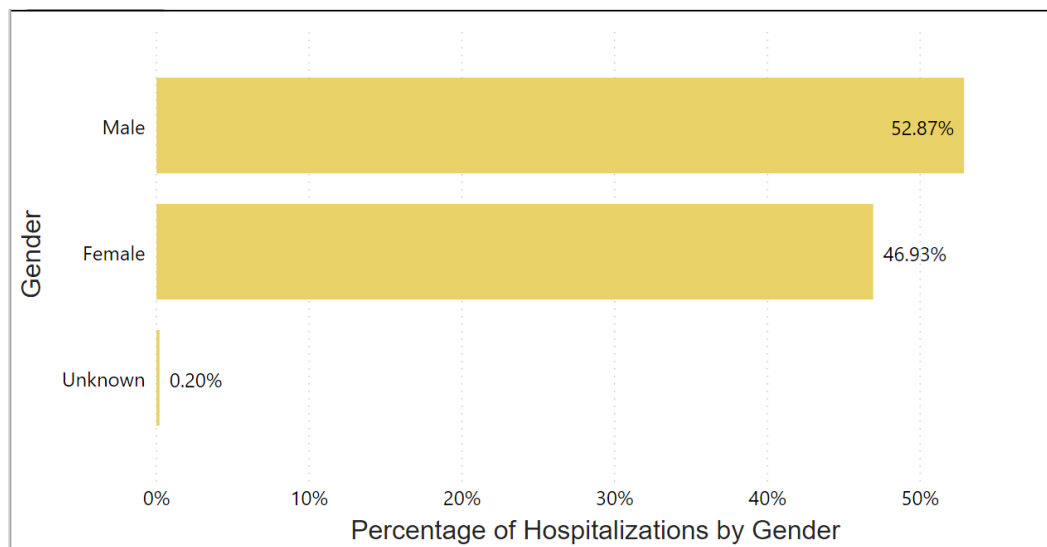


Figure 7: Percentage of COVID-19 ICU admissions by gender

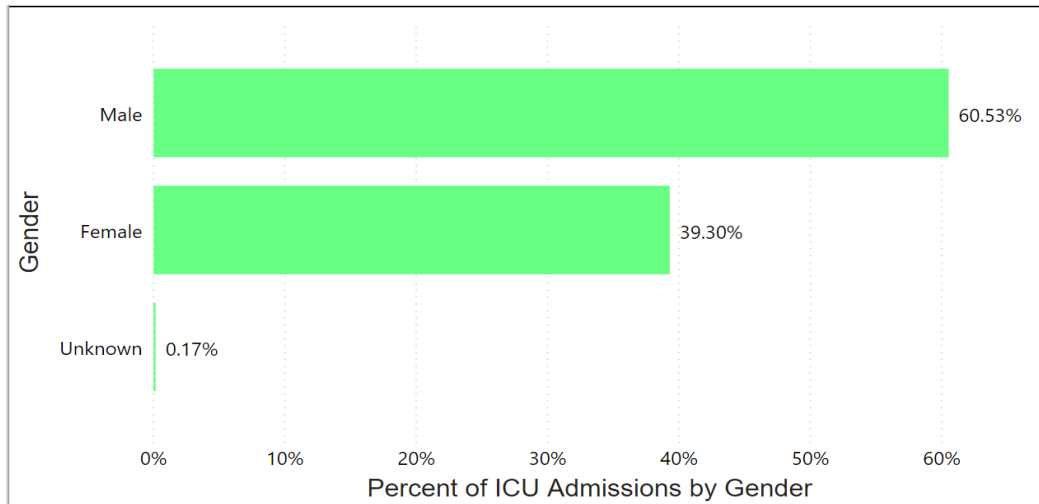


Figure 8: Percentage of COVID-19 deaths by gender

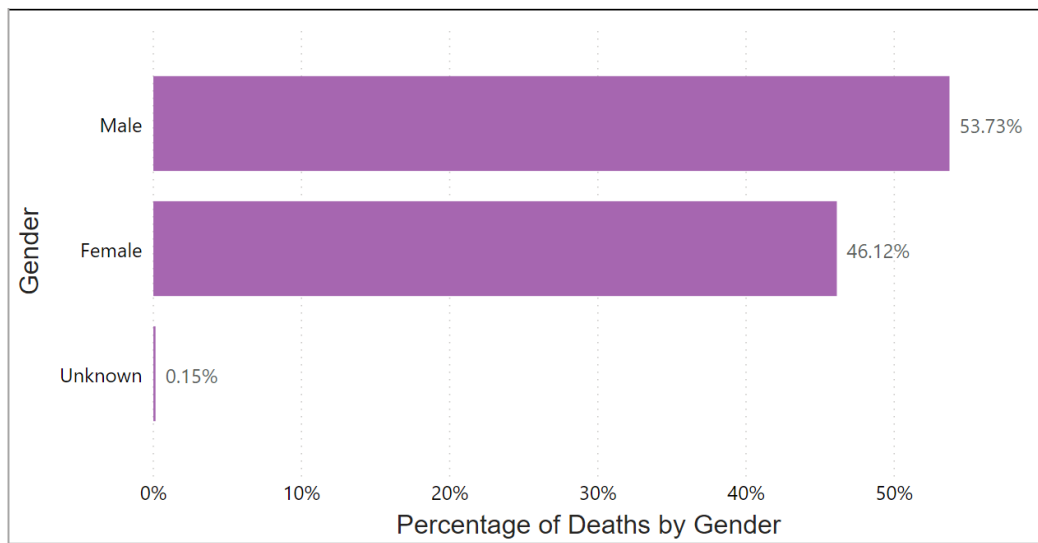


Table 2: Count and percentages of hospitalization, ICU admissions and deaths by gender

| Gender | Lab-confirmed Cases | Percent of Lab-confirmed Cases | Hospitalizations | Percent of Hospitalizations | ICU Admissions | Percent of ICU Admissions | Deaths | Percent of Deaths |
|---------|---------------------|--------------------------------|------------------|-----------------------------|----------------|---------------------------|--------|-------------------|
| Male | 2,052,218 | 45.87% | 200,530 | 52.87% | 30,620 | 60.53% | 73,248 | 53.73% |
| Female | 2,218,040 | 49.58% | 177,975 | 46.93% | 19,880 | 39.30% | 62,883 | 46.12% |
| Unknown | 45,708 | 1.02% | 770 | 0.20% | 85 | 0.17% | 202 | 0.15% |

Although the number of cases were found to be higher in females as compared to males, male population had a higher rate of hospitalizations, ICU admissions and deaths than female. Males tend to have higher rates of behaviors that are linked with severe illness from COVID-19 infection and mortality, including higher rates of tobacco use and alcohol consumption. They also tend to engage in more high-risk behaviors and are less likely to follow social distancing guidelines (M. Griffith & Sharma, 2020). Researches have shown that women generally mount stronger innate and adaptive immune responses than men making them more immune (M. Griffith & Sharma, 2020).

Race and Socioeconomic Inequities

Racial and ethnic minorities are more likely to belong to low SES which makes them more prone to acquiring fatal illness from COVID-19. There is abundant evidence that socioeconomic status is associated with multiple dimensions of health and that those with poor socioeconomic status have lower life expectancies (L. Rollston & Galea, 2020). It was found that 39.48% of the lab-confirmed cases were found in Whites followed by Hispanics and African American at 30.05% and 19.87% respectively. 39.48% of those hospitalized due to COVID-19 were White whereas 22% and 16.82% were African American and Hispanic respectively. It was also observed that ICU admissions due to COVID-19 were found to be 32.88% in White population, 20.84% in African American and 19.96% in Hispanic. The percentage of deaths is also found to be higher in Whites, found to be at 43.79%, followed by African American and

Hispanics at 19.19% and 14.59% respectively. However, this provides an inaccurate depiction as explained below.

Based on the 2019 data from US Census Bureau, the total percentage of White population in the US is 76.3% whereas that of African American and Hispanics is 13.4% and 18.5% respectively. Thus, though the percentage of COVID-19 cases, hospitalizations, ICU admissions and deaths appear to be higher in Whites but African American and Hispanics are worst affected as their overall percentage in the U.S. population is much lower than Whites. The prevalence of COVID-19 cases, hospitalizations, ICU admissions and deaths were also calculated and it was found that the Native Hawaiian/Other Pacific Islanders have the highest prevalence of the lab-confirmed cases followed by American Indian/Alaska Native at 24% and 18% respectively. The prevalence of COVID-19 hospitalization and ICU admissions was also found to be highest in Native Hawaiian/Other Pacific Islanders at 41% followed by African American at 15%. The prevalence of deaths due to COVID-19; however, was found to highest in African American population at 21%. Figures 9, 10, 11 and 12 show the graphical representation of prevalence of cases, hospitalizations, ICU admissions and deaths based on race.

Figure 9: Prevalence of Covid-19 cases by race and ethnicity

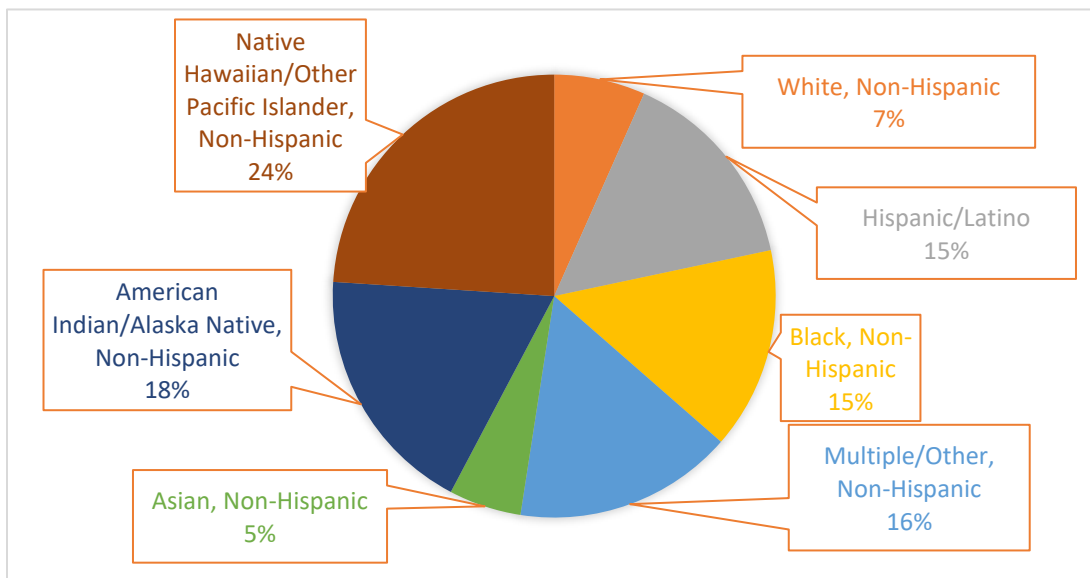


Figure 10: Prevalence of Covid-19 hospitalizations by race and ethnicity

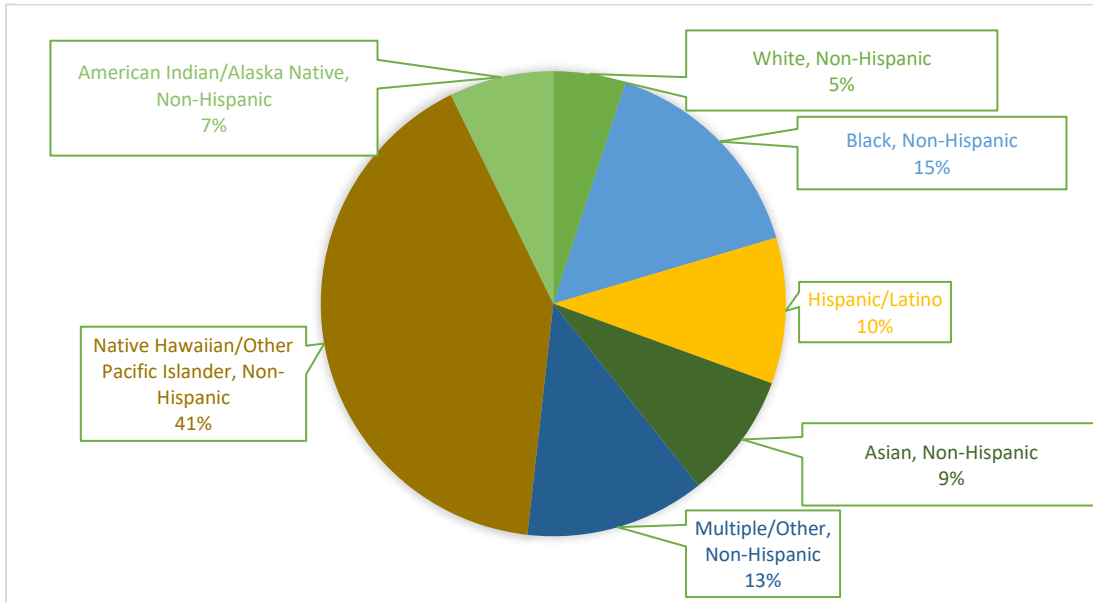


Figure 11: Prevalence of Covid-19 ICU admissions by race and ethnicity

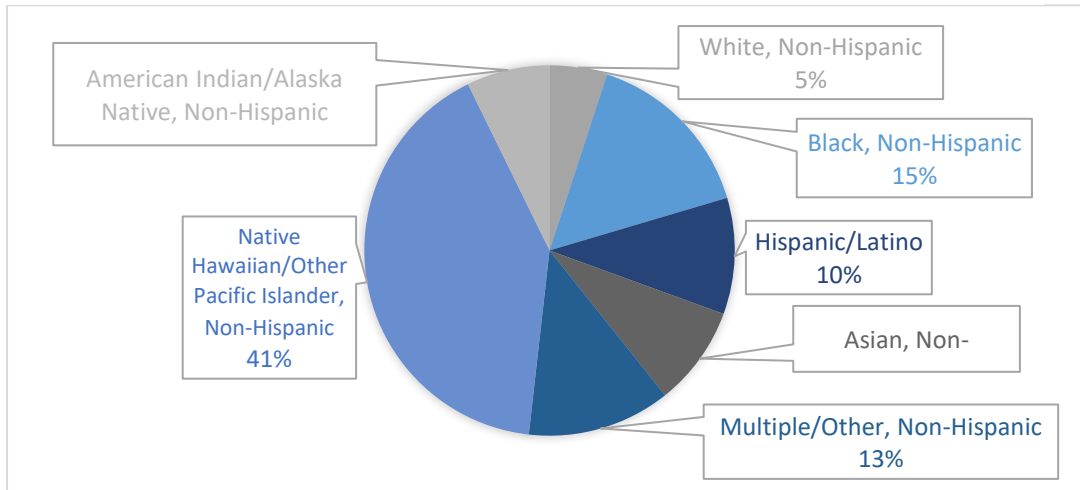
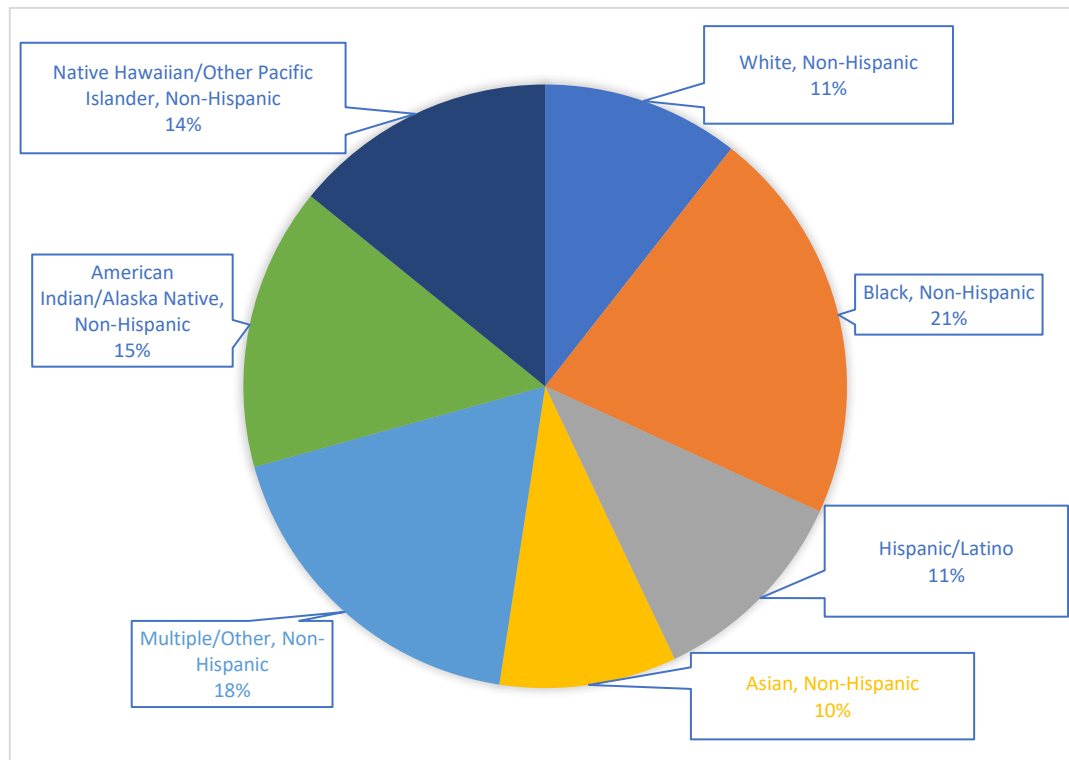


Figure 12: Prevalence of Covid-19 deaths by race and ethnicity



The data above indicates that Native Hawaiians and Pacific Islanders (NHPI) are suffering disproportionately from COVID-19 at a rate that exceeds those reported in analysis of COVID-19's disparate impact on other racial and ethnic minorities. The number of NHPI with positive COVID-19 is higher than African Americans, a racial/ethnic group receiving much attention regarding COVID-19 risk. NHPI have increased rates of health conditions which is linked to higher risk of critical illness from COVID-19. The racial group has a relatively high poverty and un-insurance rates. About 20% of NHPI are uninsured compared to 11.4% of non-Hispanic whites (Kaholokula & A. Samoa, COVID-19 Special Column: COVID-19 Hits Native Hawaiian and Pacific Islander Communities the Hardest, 2020). 24% of the Native Hawaiian population is comprised of essential workers, with heavy representation in the military, security, service, and healthcare industry (Kaholokula, A. Samoa, & E.S. Miyamoto, COVID-19 Special Column: COVID-

19 Hits Native Hawaiian and Pacific Islander Communities the Hardest, 2020). Several U.S. states such as California and Utah that have large numbers of NHPI residents report higher rates of COVID-19 positive cases among people in this group than in other racial and ethnic groups (Kaholokula, A. Samoa, & E.S. Miyamoto, COVID-19 Special Column: COVID-19 Hits Native Hawaiian and Pacific Islander Communities the Hardest, 2020).

The COVID-19 data currently available is incomplete and unreliable and needs to include information on person's occupation, education level and income. Data sources with in-depth socioeconomic measures are needed to fathom the complete impact of socioeconomic factors on contracting COVID-19, its occurrence and consequences. High quality data on socioeconomic factors are urgently needed, which will have important implications in the development of public health measures. Social measures should be considered as clinical variables, in the same way as age or gender, and should therefore be routinely recorded in medical records. This is highly important as these factors can greatly affect the overall risk of hospitalization, ICU stay and death from COVID-19.

Conclusion

The healthcare disparities highlighted by the COVID-19 emphasizes the need to address the underlying sociodemographic factors causing these inequities. Historically, pandemics have been experienced unequally with higher rates of infection and mortality among the most disadvantaged communities—particularly in more socially unequal countries (Bambra & Riordan). The identification of the individuals at high risk of contracting lethal illness from COVID-19 has helped us prepare for future challenges. It is highly important for the government agencies and policy makers to take concrete actions to eliminate these inequities and provide equal opportunities to every individual for healthcare access. It is also important that complete and reliable data on COVID-19 be collected as that will help us determine the contribution of each of the underlying factors for health disparities. We must also advocate for the strengthening of public health datasets so that data can be collated and more effectively

shared, as a vital next step to guide policy, health care provision, prevention and intervention efforts (Greenaway & Hargreaves, 2020).

While the crisis of COVID-19 has brought unprecedented challenges and difficulties all over the globe, we must have a positive outlook in our response and leverage this as an opportunity to improve health equity in the U.S. by ensuring everyone has the ability to achieve their full health potential. This can be achieved by removing any structural barriers to healthcare for disadvantaged populations.

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