

Race/Ethnicity Mortality Disparity Deepens During COVID

Disparities in mortality rates among racial and ethnic groups in the United States have been widely documented. Researchers therefore continue to examine the extent to which the COVID-19 pandemic potentially widened these racial and ethnic gaps in mortality and life expectancies.

In May 2020, NJHA's Center for Health Analytics, Research & Transformation (CHART) first identified disparities in age-adjusted COVID-19 death rates by race/ethnicity and gender in New Jersey's inpatient hospitalized population during the very start of the pandemic. In this paper, CHART tracks both COVID-19 positive, as well as non-COVID-19-positive, age-adjusted mortality rates among hospitalized inpatients by race/ethnicity and gender throughout 2020 and 2021, revealing a widening gap in disparities by race and ethnicity as the pandemic continues.

Recent data show that among COVID-19-positive inpatients, Hispanics continued to have the highest age-adjusted mortality rates both in 2020 and 2021 (78.3 and 53.8 per 1,000), closely followed by Black patients (76.5 and 49.5 per 1,000, respectively). One bright spot is that age-adjusted mortality for both COVID-19-positive and non-COVID-19 inpatients declined for all racial/ethnic groups from 2020 to 2021. However, these decreases occurred to varying degrees, with non-COVID-19 positive mortality rates remaining elevated in 2021 – compared with 2019 – among Black and Hispanic patients.

When looking at the non-COVID-19-positive inpatients in 2021, the age-adjusted mortality rate for Hispanics was approximately 14 percent higher than that of Whites, while in 2019 it was slightly higher than 7 percent. For Black inpatients, the corresponding percentages were 27 and 14 percent. Racial/ethnic disparities in mortality among the New Jersey's hospitalized population may therefore continue to widen if not addressed.

Background

Disparities in the outcomes of hospitalized patients are often impacted by differences in the wellbeing of the general population. In 2018, the Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System estimated that 13 percent of Black residents in New Jersey reported having asthma, compared with 8 percent of Whites and 8 percent of Hispanics. Approximately 15 percent of Blacks also were estimated to have diabetes compared with 10 percent of Whites and 10 percent of Hispanics. Similar differences were observed for hypertension, obesity, access to healthcare, and many other key indicators related to health outcomes.

Differences in COVID-19 vaccination uptake may also have played a role in COVID-19 hospitalization and mortality rates. In New Jersey, Whites account for approximately 45 percent of all fully vaccinated residents, followed by Hispanics (17 percent), Asians (10 percent), and Blacks (9 percent). Whites make up approximately 54 percent of New Jersey's total population, Hispanics 20 percent, Blacks 14 percent, and Asians 10 percent. Black New Jerseyans are therefore the most underrepresented group in regard to COVID-19 vaccination uptake.

Aside from racial/ethnic groups, gender differences in mortality have been well documented by demographers, with females having a higher life expectancy than males. Based on 2019 data from the Centers for Disease Control and Prevention, a female born in the United States could expect to live an additional 5.1 years compared with a male (81.4 versus 76.3 years, respectively).



In New Jersey, life expectancy was approximately 82.5 years for females and 77.6 years for males in 2019. On a national, the life expectancy for U.S. females decreased by approximately 1.5 years from 2019 to 2020. and 2.1 years for males, furthering the already considerable gender gap in mortality.

What the Data Says

In the absence of 2021 death records, this paper utilizes inpatient hospital discharge data to provide insight into the ongoing discussion around COVID-19 health disparities. While the New Jersey hospitalized population does not represent the overall state population, approximately two-thirds of all COVID-19-attributed deaths occurred in a hospital inpatient setting. Using hospital discharge data can therefore help to provide a timely and robust understanding of COVID-19's impact on mortality.

From March through December 2020 (2020), Hispanic inpatients had the highest COVID-19 age-adjusted death rate (78.3 per 1,000) followed by Blacks (76.5 per 1,000). Among COVID-19-positive inpatients, Hispanics continued to have the highest COVID-19 age-adjusted death rate in 2021 (53.8 per 1,000) followed by Asians (53.0 per 1,000). Whites had the lowest rate in both 2020 and 2021 (55.3 and 38.2 per 1,000, respectively.) (Figure 1).

Various research has shown that persons of color were more likely to experience worse health outcomes from a COVID-19 infection compared with Whites. However, when examining the hospitalized population in New Jersey, this paper demonstrates that disparities in mortality were not isolated to those inpatients with a COVID-19 infection. Non-COVID-19-positive inpatients also experienced upticks in age-adjusted mortality rates in 2020 compared with 2019, for all racial/ethnic groups. Non-COVID-positive Black inpatients had the largest age-adjusted mortality rate increase in 2020 relative to 2019 (approximately 24.6 percent), followed by Asians (an increase of 23.4 percent) (Figure 2).

While mortality rates decreased in 2021, the age-adjusted mortality rate among Black inpatients who were not positive for COVID-19 during their hospitalization in 2021 was approximately 14.7 percent higher than in 2019. The increase for non-COVID-19-positive Hispanic inpatients – from 2019 to 2021 – was 9 percent, 2.3 percent for Whites, and 0.4 percent for Asians (Figure 2).

In 2019, the age-adjusted mortality rate for Hispanic inpatients was approximately 7 percent higher than that of White inpatients; when looking at non-COVID-19-positive inpatients, it was 18 percent higher in 2020 and 14 percent higher in 2021. For Black inpatients, the corresponding percentages were 14, 32, and 27 percent (Figure 2). These increases are especially concerning as they demonstrate widening racial/ethnic gaps in mortality even among non-COVID-19-positive hospitalizations.





Gender Differences

As indicated earlier, males generally have higher death rates than females. The age-adjusted mortality rates for hospitalized females versus males in 2019 was 9.1 and 12.9 per 1,000, respectively (Figure 4). Among COVID-19 positive inpatients, these age-adjusted rates increased to 54.2 and 83.1 per 1,000 (Figure 3). While mortality rates decreased from 2020 to 2021 for both male and female inpatients, among non-COVID-19-positive inpatients, the age-adjusted mortality rates for males increased by approximately 10 percent (from 12.9 to 14.2 per 1,000). Females, however, experienced a 7 percent increase from 9.1 per 1,000 in 2019 to 9.8 per 1,000 in 2021 (Figure 4).





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Recommendations

The COVID-19 pandemic has exacerbated the underlying health disparities between racial/ethnic groups, and genders, in New Jersey. Despite the growing focus on health equity, substantial differences in mortality are often byproducts of long-term and persistent socioeconomic factors and other aspects of social determinants of health (SDOH) that are frequently intertwined.

The COVID-19 pandemic has further emphasized the critical need to narrow the gap in health outcomes. Striving for health equity requires persistent, well-targeted programs and funding. New Jersey must therefore continue to:

- Allocate additional resources for hospitals, who serve as anchor institutions in many New Jersey communities, especially investments that allow facilities to prioritize community-based interventions;
- Align the various funding and policy initiatives among state agencies to combat major public health concerns more effectively;
- Support programs that help provide housing security;
- Prioritize Medicaid reimbursements for SDOH; and
- Design interventions to combat adverse childhood experiences and provide long-lasting benefits throughout one's life

Notes:

- 1. Age standardization made using 2000 U.S. Census population using inpatient data only
- 2. 2021 Hospital Discharge Data Collection System is still preliminary. Some estimates may show minor differences when complete data are obtained.
- 3. Excluded Other (AI/AN/Multiracial race/ethnic group) group for small size reasons and Unknown race/ethnicity because of the fine age breakdowns used to adjust estimates.

References:

Data USA: https://datausa.io/profile/geo/new-jersey

Elizabeth Arias; Jiaquan Xu; Betzaida Tejada-Vera; Brigham Bastian. US State Lifetables, 2019. National Center for Health Statistics (U.S.), NVSR 70–18, 2/10/2022: https://stacks.cdc.gov/view/cdc/113251

Improving Healthcare Through AHRQ's Digital Healthcare Research Program. (Prepared by Tista. Under Contract No. HHSN316201200068W.) AHRQ Publication No. 22-0006. Rockville, MD: Agency for Healthcare Research and Quality. November 2021

- Kathleen Mullan Harris, Carolyn Tucker Halpern, Eric A Whitsel, Jon M Hussey, Ley A Killeya-Jones, Joyce Tabor, Sarah C Dean Cohort Profile: The National Longitudinal Study of Adolescent to Adult Health (Add Health). <u>https://academic.oup.com/ije/article/48/5/1415/5525255</u>
- Latoya Hill, Samantha Artiga and Sweta Haldar. Key Facts on Health and Health Care by Race and Ethnicity, KFF: Jan 26, 2022. <u>https://www.kff.org/report-section/key-facts-on-health-and-health-care-by-race-and-ethnicity-disparities-in-covid-19-impacts/;</u>
- https://www.kff.org/racial-equity-and-health-policy/report/key-facts-on-health-and-health-care-by-race-andethnicity/

Latoya Hill Follow and Samantha Artiga Follow. COVID-19 Cases and Deaths by Race/Ethnicity: Current Data and Changes Over Timehttps://www.kff.org/coronavirus-covid-19/issue-brief/covid-19-cases-and-deaths-byrace-ethnicity-current-data-and-changes-over-time/?utm_campaign=KFF-2022-The-Latest&utm_medium=email&_hsmi=204866558&_hsenc=p2ANqtz-

<u>9sJSvK1oWuRB_hW0EpcXu2_c0yH8HeVvD4WCHxQtrnIXDw9dsHJPTUuqmIZALUgkZlduFySlU7xaEj0P1</u> <u>Lz1d0rNsn_Q&utm_content=204866558&utm_source=hs_email</u>

Nambi Ndugga and Samantha Artiga. Disparities in Health and Health Care: 5 Key Questions and Answers, KFF, May 11, 2021. https://www.kff.org/racial-equity-and-health-policy/issue-brief/disparities-in-health-and-healthcare-5-key-question-and-answers/

NJHA. COVID 19: Early Analysis Shows Racial Disparity in Mortality: https://www.njha.com/chart

- NJSHAD. Retrieved Mon, 07 February 2022 15:03:42 from Department of Health, New Jersey State Health Assessment Data Web site: <u>https://nj.gov/health/shad</u>
- Pokam Tchuissue Y, Jacobs J, Chhean E, Thoumi A, Tewarson H, Hockenberry S (2021, November). Achieving health equity through race and ethnicity data: State Strategies and Lessons Learned. Washington DC, National Academy of State Health Policy, Duke-Margolis Center for Health Policy, National Governors Association Center for Best Practice
- Sherry L. Murphy, B.S., Kenneth D. Kochanek, M.A., Jiaquan Xu, M.D., and Elizabeth Arias, Ph.D. Mortality in the US 2020, NCHS Data Brief No. 427, December 2021: https://www.cdc.gov/nchs/products/databriefs/db427.htm#section_2

The New Jersey Discharge Data Collection System. <u>https://nj.gov/health/healthcarequality/health-care-professionals/njddcs/</u>

2000 US Population: <u>https://seer.cancer.gov/stdpopulations/stdpop.19ages.html</u>

Visit <u>www.njha.com/chart</u> for additional resources.