

448. Disproportionate Burden of COVID-19 on Latinx Residents among Hospitalized Patients at San Francisco's Public Health Hospital

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Background: San Francisco implemented one of the earliest shelter-in-place public health mandates in the U.S., with flattened curves of diagnoses and deaths. We describe demographics, clinical features and outcomes of COVID-19 patients admitted to a public health hospital in a high population-density city with an early containment response.

Methods: We analyzed inpatients with COVID-19 admitted to San Francisco General Hospital (SFGH) from 3/5/2020–5/11/2020. SFGH serves a network of >63,000 patients (32% Latinx/24% Asian/19% African American/19% Caucasian). Demographic and clinical data through 5/18/2020 were abstracted from hospital records, along with ICU and ventilator utilization, lengths of stay, and in-hospital deaths.

Results: Of 157 admitted patients, 105/157 (67%) were male, median age was 49 (range 19–96y), and 127/157 (81%) of patients with COVID-19 were Latinx. Crowded living conditions were common: 60/157 (38%) lived in multi-family shared housing, 12/1578 (8%) with multigenerational families, and 8/157 (5%) were homeless living in shelters. Of 102 patients with ascertained occupations, most had frontline essential jobs: 23% food service, 14% construction/home maintenance, and 10% cleaning. Overall, 86/157 (55%) of patients lived in neighborhoods home to majority Latinx and African-American populations. Overall, 45/157 (29%) of patients needed ICU care, and 26/157 (17%) required mechanical ventilation; 20/26 (77%) of ventilated patients were successfully extubated, and 137/157 (87%) were discharged home. Median hospitalization duration was 4 days (IQR, 2–10), and only 6/157 (4%) patients died in hospital.

Conclusion: In San Francisco, where early COVID-19 mitigation was enacted, we report a stark, disproportionate COVID-19 burden on Latinx patients, who accounted for 81% of hospitalizations despite making up only 32% of the patient base and 15% of San Francisco's total population. Latinx inpatients frequently lived in high-density settings, increasing household risk, and frequently worked essential jobs, potentially limiting the opportunity to effectively distance from others. We also report here favorable clinical outcomes and low overall mortality. However, an effective COVID-19 response must urgently address racial and ethnic disparities.

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449. Disproportionate of COVID-19 Mortality across NYC: Experience from the Bronx Hospital during the First Wave of Pandemic Crisis

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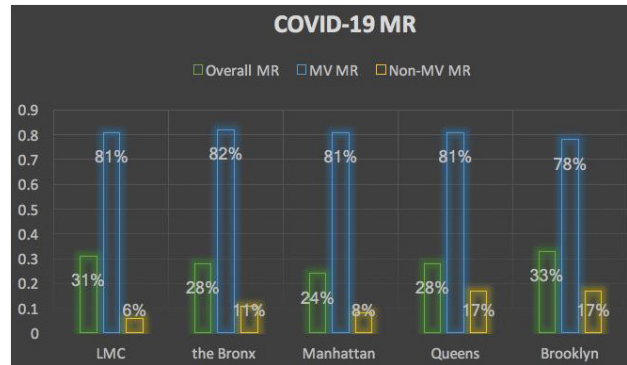
Background: The Bronx (BX) is an urban city with the most poverty, least educated population and poorest health outcomes among 62 counties in New York State. Unsurprisingly, BX has the highest rates of COVID-19 diagnoses across New York City (NYC). Lincoln Medical Center (LMC) is part of the NYC health and hospital system (NYC H+H) and has the highest COVID-19 admissions in BX and the second-highest across NYC. Herein we report our preliminary data on mortality rate (MR) of hospitalized COVID-19 patients and discuss the disproportionate of MR across NYC.

Methods: On 26 April 2020, we acquired the total number of hospitalized COVID-19 and deaths and mechanically ventilated (MV) COVID-19 and death from LMC and all other NYC H+H. Scheffe test was used to determine MR differences. The P-value (p) < 0.005 was set as a statistically significant threshold.

Results: MR of our hospitalized COVID-19 patients was 31%, which is higher than that of Man (24%, p 0.001). However, LMC has a high proportion of MV COVID-19 (local and transferred cases). Sub-group analysis of non-MV COVID-19 showed LMC MR (6%) is lower than Brooklyn (BL) (17%, p 0.00) and Queens (Qu) (17%, p 0.00) and didn't differ from Man NYC H+H centers (8%, p 0.68). Analysis of MR among MV patients between LMC and other NYC H+H centers across four boroughs did not discover any differences.

Hospitalized COVID-19 MR from all NYC H+H centers in BX (28%) did not differ from Man (24%, p 0.7) and Qu (28%, p 0.99). Interestingly, we found that MR is the highest in BL (33%). Moreover, MR of non-MV COVID-19 was higher in BL (17%) and Qu (17%) than BX (10%) and Man (8%) NYC H+H centers. We hypothesize this may result partly from the tense and shortage of health care resources in these two boroughs, especially, at the beginning of pandemic so some critical patients may not receive adequate care such as delaying intubation. Further research investigating reasons for this disproportion will help in developing the best available care plan for the ongoing crisis.

Percentage of COVID-19 Mortality in each group



Multiple comparison by Scheffe Test of MR of hospitalized patients with COVID-19 at LMC and across 4 NYC boroughs

(I) location	(J) location	Mean Difference (I-J)	Std. Error	P Value	99% Confidence Interval	
					Lower Bound	Upper Bound
Scheffe, Lincoln	The Bronx	-.03269	.01578	.368	-.0248	.0902
	Manhattan	.07149*	.01658	.001	.0111	.1319
	Queens	-.02595	.01604	.624	-.0325	.0844
	Brooklyn	-.02332	.01599	.713	-.0816	.0350
The Bronx	Lincoln	-.03269	.01578	.368	-.0902	.0248
	Manhattan	-.03879	.01309	.067	-.0089	.0865
	Queens	-.00675	.01240	.990	-.0519	.0384
	Brooklyn	-.05601*	.01233	.000	-.1010	-.0111
Manhattan	Lincoln	-.07149*	.01658	.001	-.1319	-.0111
	The Bronx	-.03879	.01309	.067	-.0865	.0089
	Queens	-.04554	.01340	.021	-.0944	.0033
	Brooklyn	-.09480*	.01334	.000	-.1434	-.0462
Queens	Lincoln	-.02595	.01604	.624	-.0844	.0325
	The Bronx	.00675	.01240	.990	-.0384	.0519
	Manhattan	.04554	.01340	.021	-.0033	.0944
	Brooklyn	-.04926*	.01267	.004	-.0955	-.0031
Brooklyn	Lincoln	.02332	.01599	.713	-.0350	.0816
	The Bronx	.05601*	.01233	.000	.0111	.1010
	Manhattan	.09480*	.01334	.000	.0462	.1434
	Queens	.04926*	.01267	.004	.0031	.0955

Multiple comparison by Scheffe Test of MR of non-MV patients with COVID-19 at LMC and across 4 NYC boroughs

(I) location	(J) location	Mean Difference (I-J)	Std. Error	P Value	99% Confidence Interval	
					Lower Bound	Upper Bound
Scheffe, Lincoln	The Bronx	-.04724	.01396	.022	-.0981	.0037
	Manhattan	-.02202	.01453	.681	-.0750	.0309
	Queens	-.11315*	.01401	.000	-.1642	-.0621
	Brooklyn	-.11081*	.01421	.000	-.1626	-.0590
The Bronx	Lincoln	.04724	.01396	.022	-.0037	.0981
	Manhattan	.02522	.01094	.257	-.0147	.0651
	Queens	-.06591*	.01025	.000	-.1033	-.0286
	Brooklyn	-.06357*	.01051	.000	-.1019	-.0253
Manhattan	Lincoln	.02202	.01453	.681	-.0309	.0750
	The Bronx	-.02522	.01094	.257	-.0651	.0147
	Queens	-.09113*	.01100	.000	-.1312	-.0510
	Brooklyn	-.08879*	.01125	.000	-.1298	-.0478
Queens	Lincoln	.11315*	.01401	.000	.0621	.1642
	The Bronx	.06591*	.01025	.000	.0286	.1033
	Manhattan	.09113*	.01100	.000	.0510	.1312
	Brooklyn	.00234	.01057	1.000	-.0362	.0409
Brooklyn	Lincoln	.11081*	.01421	.000	.0590	.1626
	The Bronx	.06357*	.01051	.000	.0253	.1019
	Manhattan	.08879*	.01125	.000	.0478	.1298
	Queens	-.00234	.01057	1.000	-.0409	.0362