Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Conclusion: Modification of standard ROTEM channels using un-activated testing with heparinase addition demonstrates the expected reduced clotting times and increased clot firmness in COVID-19 associated hypercoagulability. Use of therapeutic and prophylactic anticoagulation was common in this population, and results of heparinase to ROTEM testing eliminates this confounding effect. Longitudinal assessment shows normalization of multiple hypercoagulable effects in COVID-19 disease around days 9-11 in this moderately ill cohort.

83 The Effect SARS-CoV-2 Had on Disease Distribution in the Emergency Department at a Large Academic Center

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Study Objective: To assess the effect SARS-CoV-19 had on the distribution of diseases in the emergency department (ED) of a large academic center located in a region with low SARS-CoV-19 infection rates and deaths during the first peak of the pandemic.

Methods: This is a cross-sectional observational study that collected data from every ED visit from March through June, 2019 and compared it to the same period in 2020. The main ICD-10 code associated with each visit was organized into 1 of 530 disease categories. The top 20 disease categories for 2019 were compared to 2020 to assess for any statistically significant variation in prevalence.

Results: An unpaired T-test showed an increase in mean age from 2019 to 2020 (34.83 vs 37.97, P= .0001). A similar increase in age is noted when the data is divided into minors in 2019 vs 2020 (6.60 vs 6.39 P< .0002) but adults, 18 or older, show no statistically significant change in age. Mean Emergency Severity Index (ESI) decreased from 3.157 to 3.071 (P< .0001) using a T-test. There was a similarly statistically significant decrease in ESI when the data was divided into minors in 2019 vs 2020 (3.419 vs 3.23 P< .0001) and adults in 2019 vs 2020 (3.044 vs 3.024 P< .002). A Z-Test showed a disproportionate decrease in the percentage of minorities coming to the ED from 2019 to 2020 (37.5% vs 36.6%, P=.0252). ED volume rates dropped by 52% in 2020. When comparing disease distribution for minors in 2019 vs 2020, a Z-Test found a statistically significant disproportionate decrease (P>.05) in the diseases under these categories: other specified upper respiratory infections, viral infection, abdominal pain and other digestive/abdomen signs and symptoms, otitis media, nausea and vomiting, intestinal infection, asthma, respiratory signs and symptoms, acute bronchitis, allergic reactions, skin and subcutaneous tissue infections. When comparing disease distribution for adults in 2019 vs 2020, a Z-Test found a statistically significant disproportionate decrease (P<.05) in diseases under these categories: Other specified upper respiratory infections, viral infection, abdominal pain and other digestive/abdomen signs and symptoms, otitis media, nausea and vomiting, intestinal infection, asthma, acute bronchitis

Conclusion: National data shows that ED visits decreased significantly in 2020 compared to previous years with certain diseases or disease categories receiving a disproportionate decrease in prevalence. Data from this study shows a similar pattern of certain disease categories having disproportionate decreases in prevalence combined with increased acuity of patients presenting to the ED. While certain disproportionate decreases can be explained by mask mandates, social distancing, stay-at-home orders, and increased access to telemedicine, the authors of this study worry that fears around contracting SARS-COVID-19 kept patients from receiving needed medical care.

84 Racial/Ethnic Disparities in Hospitalization And Clinical Outcomes Among COVID-19 Patients in an Integrated Health Care System In New York City

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Study Objectives: During the COVID-19 pandemic Black, Indigenous, Hispanic and Asian (BIPOC) populations were nearly three times more likely to have died of COVID-19 than White patients. These disparate outcomes compound existing health disparities which result in BIPOC patients experiencing larger burdens of disease and decreased life expectancy. The objective of our study was to examine racial and ethnic disparities in hospitalization, medication usage, ICU admission and in-hospital mortality for COVID-19 patients within an integrated health care system in New York City (NYC).

Methods: In this retrospective cohort study, we analyzed adult patients with lab-confirmed COVID-19 diagnosis within a large urban health system in NYC between February 28, 2020 and August 28, 2020. Primary outcome was the rate of admission from the ED. Secondary outcomes were differences in medication administration, admission to an intensive care unit (ICU), and in-hospital mortality. We utilized multivariable logistic regression to test for differences by race/ethnicity in the odds of our primary and secondary outcomes accounting for hospital-level clustering.

Results: A total of 4.717 adult patients with a positive SARS-CoV-2 test in the ED or inpatient setting were included in the primary analysis: 5.219 (68.2%) were admitted to an inpatient setting. Black patients were the largest group (29.1%), followed by Hispanic (29.0%), White (22.9%), Asian (5.86%) and patients of other race-ethnicity (19.0%). Black patients were overrepresented at the community site in Brooklyn, while Asian and Hispanic patients were overrepresented at the community site in Queens. Overall, White patients (24.5%) were disproportionately overrepresented among admitted patients. Hispanic patients had an overall significantly lower adjusted rate of inpatient admission compared to White patients (OR= 0.51, 95% CI 0.34 - 0.76). Black (OR= 0.60, 95% CI, 0.43 - 0.84) and Asian patients (OR= 0.47; 95% CI 0.25 - 0.89) were overall less likely to be admitted to an ICU setting. There were lower odds of inpatient admission (OR=0.68, 95% CI 0.46-0.99) at the community site located in Queens, where Asian and Hispanic patients were overrepresented. There was significantly higher mortality at the community-based sites in Brooklyn (OR=4.38, 95% CI 2.66 - 7.24) and Queens (OR= 2.96, 95% CI 2.12 - 4.14), where Black, Asian, and Hispanic patients were overrepresented.

Conclusion: BIPOC patients accounted for a larger proportion of COVID patients seeking care in the ED compared to the demographic composition of NYC, but were less likely to be admitted to the ICU or hospitalized. Hospitals serving a high proportion of BIPOC patients had significantly higher mortality even within an integrated health system with shared resources. Limited capacity during the COVID-19 pandemic likely exacerbated preexisting health disparities among racial and ethnic minority groups.

85 Impact of COVID-19 on Patient Populations in the Emergency Department in Flint, Michigan

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Study Objectives: As the COVID-19 pandemic continues, it is necessary to elucidate its impact on services in the emergency department (ED). The research project aims to identify and analyze changes in medical presentations and disease severity within the ED at Hurley Medical Center (HMC) in Flint, Michigan due to the COVID-19 pandemic.

Methods: The present study is a retrospective chart review on HMC’s ED encounters focusing on adults 18 years and above in Flint/Genesee County in Michigan. Data collected for the study was obtained from patient charts from February 1, 2019 to July 31, 2019 and from February 1, 2020 to July 31, 2020. Data from 2019 versus 2020 was analyzed using a combination of independent t-test, chi-square analysis, and regression modeling.

Results: There were a total of 59,345 visits analyzed within the study; 33,648 ED visits within the study were in 2019 compared to 25,697 visits in 2020. There was a significant difference in patient sex between 2019 and 2020 with a larger percentage of males presenting in 2020 vs 2019 (p<0.001). Furthermore, the ICD-10 diagnosis differed between 2019 and 2020 with significant increase in the percentage of infectious disease, COVID-19, generalized symptoms, pneumonia, respiratory failure/insufficiency/arrest, patients with socioeconomic factors, mental health, nausea/