Conclusion: Our findings showed minority groups were more likely to have a positive COVID-19 test. Latinx patients were more than twice as likely to require intubation compared to white patients. Age, Sex, Triage Acuity Level, and non-White Race were significantly associated with mortality. This data suggests non-White patients are more likely to contract and suffer from Covid-19. These findings show minority groups have a greater need for ventilators and other resources associated with severe Covid-19. In the event of resource shortages, they should be directed to minority communities.

	Mortality				Ventilator			
			95% C.I.for OR				95% C.I.for OR	
	p-value	OR	Lower	Upper	p-value	OR	Lower	Upper
Age	<0.001	1.049	1.036	1.062	0.001	0.979	0.967	0.991
Sex F vs M	0.008	0.647	0.469	0.892	0.002	0.554	0.381	0.806
Race	0.082				<0.001			
Race B vs W	0.021	0.566	0.348	0.918	0.433	0.792	0.443	1.418
Race L vs W	0.817	1.050	0.692	1.594	0.001	2.240	1.391	3.606
Race O vs W	0.630	0.866	0.482	1.556	0.110	1.709	0.886	3.296
cc SOB	0.115	1.287	0.940	1.762	0.020	1.520	1.069	2.162
cc Cough	0.187	0.779	0.537	1.129	0.252	1.261	0.848	1.877
ED level	<0.001	0.434	0.326	0.577	<0.001	0.365	0.261	0.508
Hypertension	0.546	0.874	0.564	1.354	0.026	0.561	0.337	0.934
Diabetes	0.934	1.018	0.674	1.536	0.213	0.740	0.460	1.189
CAD-MI	0.544	0.859	0.525	1.405	0.004	0.379	0.197	0.731
CKD	0.402	1.276	0.721	2.256	0.068	0.514	0.251	1.050
Cancer	0.431	1.251	0.717	2.183	0.985	1.006	0.531	1.907
Number co-morbidities	0.383	1.110	0.878	1.403	<0.001	1.673	1.275	2.195
Site	<0.001				0.001			
Site 2 vs 1	0.005	1.735	1.181	2.550	0.689	1.098	0.695	1.735
Site 3 vs 1	0.159	0.726	0.465	1.133	0.001	0.455	0.281	0.735
Constant	<0.001	0.082			0.004	6.020		

41 Clinical Outcomes among COVID-19 Patients Taking Non-Steroidal Anti-Inflammatory Drugs

Perkins SJ, Holmes AR, Nelson JR, Hirschl JR, Chopra Z, Medlin R, Fung C, Korley FK/University of Michigan Medical School, Ann Arbor, MI

Study Objectives: Concerns over the use of non-steroidal anti-inflammatory drugs (NSAIDs) for the management of fever and myalgia in COVID-19 patients were raised after four cases of critical illness in young, otherwise healthy patients who took NSAIDS were observed in France. France's health minister subsequently made a recommendation to use acetaminophen in lieu of ibuprofen. However, the association between NSAID use and outcomes in COVID-19 illness has not been adequately studied. The objective of this study is to determine whether an association exists between prior NSAID use and COVID-19 illness severity.

Methods: We performed a single-center retrospective cohort study of consecutive adult patients diagnosed in the emergency department (ED) with PCR confirmed SARS-Cov-2 infection. NSAID use was ascertained based on a review of the medication list found in patients' electronic medical records. Our primary outcome was critical COVID-19 illness, defined as a composite of death, respiratory failure requiring intubation, and shock requiring vasopressors, occurring within 28 days of ED presentation. We modeled the association between NSAID use and our primary outcome using logistic regression, and adjusting for hypertension, diabetes, asthma, chronic obstructive pulmonary disease (COPD), other chronic lung disease, obstructive sleep apnea, immunocompromised status, angiotensin converting enzyme inhibitor (ACE-I) or aldosterone receptor blocker (ARB) use, anticoagulation use, and immunosuppressant use.

Results: Among the 422 patients studied, 88 (21%) were on NSAIDS prior to acquiring COVID-19 and a total of 89 patients (21%) developed critical COVID-19 illness within 28 days of ED presentation. Among those using NSAIDs, 18 (20%) developed critical illness. Of the 11 predictor variables examined, hypertension (odds ratio = 1.04 (95% CI: 0.38 - 1.71)), diabetes (0.97 (95% CI: 0.42 - 1.52)), and chronic lung disease (1.20 (0.20 - 2.20)) were significantly associated with increased risk of critical COVID-19 illness (Table 1). NSAID use was not found to be an independent predictor of critical COVID-19 illness (odds ratio = 0.05 (95% CI; -0.57 - 0.73)).

Conclusion: To our knowledge, this is the first study of the association between NSAID use and critical COVID-19 illness. Our results demonstrate that NSAID

use does not significantly increase the risk of critical COVID-19 illness. This study is limited by lack of prospective ascertainment of NSAID use. Prospective evaluation of evaluate outcomes among COVID-19 patients with NSAID use is warranted.

Predicting adverse outcomes among patients with COVID-19 using past medical and medication history

	Estimated Effect Size on Adverse Outcome (95% CI)	p
Past Medical History		
Hypertension	1.04 (0.38 - 1.71)	0.0021*
Diabetes	0.97 (0.42 - 1.52)	0.0005*
Asthma	-0.15 (-0.82 - 0.53)	0.6655
COPD	-0.04 (-0.84 - 0.76)	0.9199
Chronic Lung Disease	1.20 (0.20 - 2.20)	0.0185*
Obstructive Sleep Apnea	0.09 (-0.58 - 0.75)	0.7984
Immunocompromised	0.42 (-0.48 - 1.32)	0.3577
Medications		
ACE-I or ARB	-0.31 (-0.90 - 0.29)	0.3158
Anticoagulation	0.31 (-0.25 - 0.88)	0.2804
Immunosuppressant	-0.38 (-1.48 - 0.72)	0.5009
NSAID	0.08 (-0.57 - 0.73)	0.8182

*p<0.05

42 Advanced Fibrosis Is Unlikely in the Majority of Patients from an Appalachian Emergency Department's Non-Targeted Hepatitis C Virus Screening

Moore JD, Havens J, Galbraith J, Humphries R/University of Kentucky, Lexington, KY; UK HealthCare, Lexington, KY; University of Mississippi, Jackson, MS

Study Objectives: We have previously demonstrated a high prevalence of Hepatitis C Virus (HCV), particularly among young, publicly insured patients, reflecting the escalating syndemic of opioid injection and HCV transmission. We aim to describe the degree of hepatic fibrosis among patients with evidence of HCV infection identified from an adult academic emergency department (ED) non-targeted HCV screening program.

Methods: The study was a retrospective cohort analysis of ED systematic, non-targeted, opt-out HCV testing outcomes from July 2018 through January 2019. To assess the degree of liver disease as evidenced by fibrosis, Fibrosis-4 (FIB4) and aspartate transaminase to platelet ratio (APRI) scores were calculated from available AST, ALT and Platelet lab values pulled from the electronic medical record, collected on the same day as the initial ED visit. The absence or presence of advanced fibrosis or cirrhosis was determined using validated cut-offs: FIB4 < 1.45, APRI < 1; FIB4 > 3.25, APRI > 2 respectively.

Results: As previously reported there were 21,359 unique adult visitors during the time period studied. Of these, 16,700 individuals were verbally engaged and did not opt out of testing. A total of 11,635 individuals received HCV Ab testing with 1,459 patients (12.5%) having reactive results. Newly identified information shows that 1,241 (85%) of these patients had concomitant labs as part of routine ED care sufficient to calculate a FIB4 and APRI score. Data indicate that advanced fibrosis or cirrhosis was not likely in the majority of patients (FIB4 56%, 707/1241 patients; APRI 72.6%, 901/1241 patients). Those with available FIB4 and APRI were more likely to be born after 1965 (857/1241 patients, 69.1%), of whom 90.9% (779) had government insurance or were uninsured (Medicaid 85.6%, 667 patients; Medicare 8.5%, 66 patients; Uninsured 5.9%, 46 patients). Of these, advanced fibrosis or cirrhosis was not likely in the