

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.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active. know what acts constitute reportable violence. To identify barriers in reporting, we hypothesized that ED staff may not fully understand reportable crimes and their understanding may differ from those of law enforcement officers (LEO).

Methods: An anonymous REDCap survey with four hypothetical case scenarios (Table 1) was sent to ED staff at our academic medical center, as well as LEO at the local police department. Respondents were asked to indicate whether they considered any of the scenarios to be reportable as a crime if it occurred in the ED. Chi-square analysis was used for comparison. The study was deemed exempt by Mayo Clinic Institutional Review Board.

Results: 77 LEO and 261 ED staff completed the survey. Both groups were equally likely to believe that a reportable crime occurred in scenario 1 (LEO: 26.0%, ED: 32.2%, p =.37) and in scenario 2 (LEO: 97.4%, ED: 95.4%, p =.65). However, the two groups differed in scenarios 3 and 4. In scenario 3, only 20.8% of LEO believed it represented a reportable crime, compared to 43.7% of ED staff (p <.001). Similarly, more ED staff believed that a reportable crime occurred in scenario 4 compared to LEO (LEO: 66.2%, ED: 81.2%, p =.009).

Conclusion: There was disagreement between ED staff and LEO on what actions in the ED constitute a reportable crime. Additionally, there was variability among both groups' answers in three of the four scenarios. While the scenarios were hypothetical, they are not unrealistic in our specialty. Improvement interventions could be targeted at ED staff around the law and for LEOs to understand the unique environment of the ED and patient responsibilities. As health systems seek to improve workplace safety, it is important to consider the barriers to reporting violent incidents, including staff understanding of what acts may even constitute a crime.

Table 1. Case scenarios

- Scenario 1: An 85-year-old man with known dementia is transferred to the ED from his nursing home for back pain and is not oriented to the year or his present location. He becomes agitated and punches a nurse attempting to obtain his vitals.
- Scenario 2: A 25-year old man is brought into the ED by EMS with the complaint of broken teeth after getting into an altercation and he appears to be intoxicated. He spits blood-tinged saliva into the face of the phlebotomist performing venipuncture.
- Scenario 3: A 70-year-old female comes into the ED for abdominal pain. After a lengthy workup and prolonged stay, she begins showing signs of delirium and makes threats to find her doctor's house upon discharge and harm him.
- Scenario 4: A 1-year old is brought into the ED by his parents for a fever, rash, and upper respiratory symptoms. Upon hearing that a viral infection is the likely culprit and no further diagnostic studies will be ordered or antibiotics prescribed, the mother becomes increasingly angry and eventually throws a chair in the room, narrowly missing the medical student.

357 Leukocytes, Platelets, and Positive SARS-CoV-2 Results in Admitted Emergency Department Patients



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Study Objectives: Since the first few cases of Coronavirus disease 2019 (COVID-19) were reported in December 2019, the pandemic has affected over four million patients worldwide with over 250,000 deaths as of early May, 2020. As testing for COVID-19 is a limited resource, increasing its efficacy will play a critical role in managing this pandemic. Early reports have indicated an association between blood cell count and COVID-19. The objective of this study is to determine whether or not white blood cell and platelet count at presentation can guide clinical decisionmaking regarding management of persons under investigation (PUIs)

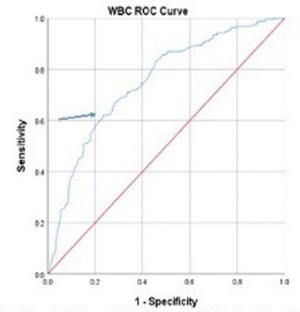
Methods: Retrospective electronic medical record review (EMR) over one month from 3/15/2020 to 4/15/2020. Data was collected from three community emergency departments (ED), all sites of a single emergency medicine residency program.

Included were all ED patients tested in the ED for SARS_CoV-2 and admitted to the hospital. Excluded were patients less than 18, cardiac arrests, and missing data. Abstracted data include demographics, admission diagnosis, ED vital signs, white blood cell (WBC) count, platelet (PLT) count, and result of COVID-19 testing. With power set at 0.80 and significance set at 0.05, a sample size of 340 patients would detect at least 15% differences among the variables related to positive SARS_CoV-2. ROC analysis was used to define cut off points for prediction of Covid result based on WBC and Platelet counts. Sensitivity, specificity, positive and negative likelihood ratio, all with 95% CI are reported.

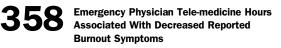
Results: 484 cases met inclusion/exclusion criteria. The mean age was 67.9 years (SD: 16.6) with 39.9% females. SAR-CoV-2 virus was detected in 245 patients (50.6%). COVID-19 positive patients had significantly lower WBC (7.2 versus 11.2; p<.001) and platelet counts (211 versus 239; p<.001). ROC analysis of both WBC and PLT were significant with area under the curve of 75% and 64.5% (p<001). At a white count of 7.0 or less, sensitivity was .624, specificity was .766, positive likelihood ratio 2.65 (95% CI: 2.06 to 3.40), and negative likelihood ratio 0.50 (95% CI: 0.42 to 0.59). At a platelet count of 200 or less, sensitivity was .543, specificity was .716, positive likelihood ratio 0.55 to 0.75). When combined, lower WBC plus lower platelets gave a sensitivity of .437, specificity of .849 with positive likelihood of 2.90 (95% CI: 2.08 to 4.04) and negative likelihood of .66 (95% CI: .59 to .75).

Conclusion: In this multi-center community study of ED patients admitted over one month with suspected SARS-CoV-2 infection, both the initial white cell count and platelet counts were significantly lower in SARS-CoV-2 positive patients. Patients with both initial WBC less than 7.0 and Platelets less than 200 had increased odds of positive SARS-CoV-2 by a factor of three.

Figure 1: ROC Analysis for WBC



AUC = 75% p<.001 WBC cut off at 7.0 gives sensitivity of .620 and specificity of .766



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Study Objectives: Whereas 45% of the 1 million physicians in the U.S. report symptoms of burnout (ie, emotional exhaustion, depersonalization, and reduced