

#142 Mariam Majzoub

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### **Risk Factors for Mortality from COVID-19 in a New York Inner city Epicenter**

#### **RATIONALE:**

Being the epicenter of COVID-19 in USA, New York's inner city areas were the most affected during Spring. Reviewing the clinical profiles of affected individuals allows us to identify risk factors for COVID-19 mortality.

#### **METHODS:**

We collected data from 109 charts of COVID PCR+ adult patients (Survivors n554; Non-survivors n555) admitted to University

Hospital of Brooklyn (Mar 2020-Jun 2020) for COVID related symptoms. EMR review included demographic profile, comorbidities, vital signs at presentation and medications administered. News2 Score, which quantifies abnormal vital signs, and Charlson Comorbidity Index (CCI) were calculated for each patient. Statistical analysis was performed using T test and Chi-square test

#### **RESULTS:**

The age of survivors was significantly lower (67.16±11.3) than non-survivors (74.4 ±10.5) ( $P<0.01$ ). 65% (36/55) of deaths were men ( $P=0.1$ ). Length of stay was longer in survivors (12.78 ±15.1 days Vs. 8.26±9.8 days);  $P=0.04$ . News2 Score was significantly higher in non-survivors (9.38 ±2.81 Vs. 6.76 ±3.1 in survivors) ( $P<0.01$ ). There were no difference in CCI (4.2

62.7 in survivors Vs. 4.71±2.0;  $p=0.28$ ). 40.7% (22/54) of survivors received steroids Vs. 21.8% (12/55);  $P=0.03$ . No difference in use of hydroxychloroquine, azithromycin and full dose anticoagulation ( $p=0.91$ ,  $p=0.14$ ,  $p=0.79$  respectively).

Non-survivors had more cancer (8/55 Vs. 2/54;  $P=0.04$ ). There were no significant difference in presence of hypertension, hyperlipidemia, diabetes, CAD, CHF, asthma and COPD.

#### **CONCLUSIONS:**

Elderly patients with early signs of COVID should seek prompt medical care. Patients with higher News2 Score at presentation and those with cancer are more likely to die from COVID-19 infection.