Results. The average age of our study population was 65 years; 68% were male. The average hospital length of stay (LOS) was 34 days. The mean time from admission to the development of Candidemia was 16 days. Associated comorbidities included cardiovascular diseases (CVD) in 79%, diabetes mellitus (DM), in 68%, and obesity in 50%. Underlying kidney disease was present in 10%. Treatments for COVID-19 included convalescent plasma (53%), remdesivir (53%), steroids (52%) and tocilizumab (19%). All patients were managed in the intensive care unit (ICU) and 95% required multiple central line (CL) placements. Most of the patients (58%) required hemodialysis (HD); all patients were treated with multiple antibiotics. The average LOS in the ICU was 25 days. Despite anti-fungal treatment, 68% expired. The 28-day mortality was 50%.

Conclusion. The occurrence of Candidemia in our hospitalized patients with acute COVID-19 infection was associated with a history of CVD, DM, obesity, prolonged hospital LOS, requirement for multiple CL, HD, treatment with multiple antibiotics and a long stay in the ICU. The mortality of COVID-19 patients with Candidemia is high. The development of strategies to mitigate the occurrence of nosocomial Candidemia in this population of patients is urgently needed.

Disclosures. All Authors: No reported disclosures

| Table 2. Bivariate analysis: Demographics and clinical characteristics by mortality |
|----------------------------------------|-------------------|-----------------|-------------|
| n=552 | n=73 | p-value |
| No (%) | Yes (%) |
| Age (median, IQR) | 54 (43, 62) | 62 (53, 70) | 0.001 |
| Race/Ethnicity | 0.65 |
| Non-Hispanic Black | 192 (35) | 30 (41) |
| Non-Hispanic White | 24 (4) | 3 (4) |
| Hispanic | 324 (59) | 40 (55) |
| Asian | 11 (2) | 0 |
| Other | 1 (<1) | 0 |

Table 3. Bivariate analysis: Demographics and clinical characteristics by ICU Admission

| n=472 | n=153 | p-value |
|----------------------------------------|-------------------|-----------------|-------------|
| No (%) | Yes (%) |
| Age (median, IQR) | 54 (42, 62) | 57 (48, 65) | 0.005 |
| Gender | 0.97 |
| Female | 152 (32) | 49 (32) |
| Male | 320 (68) | 104 (68) |
| Race/Ethnicity | 0.51 |
| Non-Hispanic Black | 165 (35) | 57 (37) |
| Non-Hispanic White | 23 (5) | 4 (3) |
| Hispanic | 273 (58) | 91 (59) |
| Asian | 10 (2) | 1 (1) |
| Other | 1 (<1) | 0 |

| Comorbidities | Diabetes mellitus | 207 (37) | 42 (58) | 0.001 |
| Severity of illness* | 0.001 |
| Critical | 4 (<1) | 6 (8) |
| Severe | 241 (44) | 57 (78) |
| Moderate | 199 (36) | 5 (7) |
| Mild | 108 (20) | 5 (7) |

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288. Clinical Variables Associated with COVID-19 Mortality and ICU Admission in a Public Safety-net Hospital in Chicago
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Session: P-14. COVID-19 Complications, Co-infections, and Clinical Outcomes
Background. The COVID-19 pandemic has disproportionately impacted minorities in the United States. John H. Stroger Jr. Hospital (JSH) is a tertiary care hospital within the safety-net system for Cook County in Chicago, Illinois. In this study we report demographics, clinical characteristics and outcomes of patients admitted with COVID-19 in our hospital during the spring surge of 2020.

Methods. A retrospective study was done including patients > 18 years of age admitted to JSH with positive PCR for SARS-CoV2 from March 18 to May 30th, 2020. Outcomes, clinical and demographic characteristics were extracted from the electronic medical record. Moderate and severe disease were defined as radiographic evidence of pulmonary infiltrates and SpO2 > 94% on room air or SpO2< 94% on room air, respectively. Bivariate analysis and logistic regression were performed to assess for risk factors for admission to the intensive care unit and mortality.

Results. 625 patients were included, 424 (68%) were male. Median age was 44 years (44,63). 364 (58%) were Hispanic and 222 (36%) non-Hispanic Blacks. 113 (18%) of patients presented with mild disease, 204 (33%) with moderate disease, 298 (48%) with severe disease. 73 patients (12%) died. 153 (24%) required ICU admission, 84 (13%) required intubation [Table 1]. In bivariate analysis, increasing age and diabetes (DM) were associated with increased mortality and ICU admission (p=0.001, Tables 2 and 3). Race/ethnicity was not associated with increased mortality or ICU admission. In the multivariate analysis, elevated glucose on admission regardless of DM and CKD were associated with mortality (p < 0.001).

Table 1. Demographic characteristics, severity of illness on admission and outcomes of the studied population

| Characteristic | n=625 |
|----------------|--------|
| Age (median, IQR) | 55 (44,63) |
| Gender | 0.65 |
| Female | 201 (32) |
| Male | 424 (68) |
| Race/Ethnicity | 0.51 |
| Non-Hispanic Black | 222 (36) |
| Non-Hispanic White | 27 (4) |
| Hispanic | 364 (58) |
| Asian | 11 (2) |
| Other | 1 (<1) |
| Severity of Illness on Admission | 0.001 |
| Critical | 10 (2) |
| Severe | 298 (48) |
| Moderate | 204 (33) |
| Mild | 113 (18) |
| Outcomes | 0.001 |
| Death | 73 (12) |
| ICU Admission | 153 (24) |
| Intubation | 84 (13) |
| Discharge out of Hospital | 500 (80) |
| Readmission | 19 (3) |

Conclusion. JSH is a safety net hospital that provides care for the most vulnerable population of Chicago. The proportion of Hispanic patients increased in the later weeks of the pandemic until they represented most of the inpatient population and presented with more severe disease (Figure 1). Although race was not associated with mortality or ICU admission, the high prevalence of chronic diseases such as hypertension and DM in our population may explain the higher rate of admissions. Strengthening of preventive medicine and social engagement with minorities must be a crucial effort to decrease the burden of COVID-19 in this population.

Disclosures. All Authors: No reported disclosures

| Table 2. Bivariate analysis: Demographics and clinical characteristics by ICU Admission |
|----------------------------------------|-------------------|-----------------|-------------|
| n=472 | n=153 | p-value |
| No (%) | Yes (%) |
| Age (median, IQR) | 54 (42, 62) | 57 (48, 65) | 0.005 |
| Gender | 0.97 |
| Female | 152 (32) | 49 (32) |
| Male | 320 (68) | 104 (68) |
| Race/Ethnicity | 0.51 |
| Non-Hispanic Black | 165 (35) | 57 (37) |
| Non-Hispanic White | 23 (5) | 4 (3) |
| Hispanic | 273 (58) | 91 (59) |
| Asian | 10 (2) | 1 (1) |
| Other | 1 (<1) | 0 |
| Comorbidities | Diabetes mellitus | 178 (38) | 71 (46) | 0.06 |

Severity of illness* | <0.001 |
| Critical | 1 (<1) | 9 (6) |
| Severe | 191 (40) | 107 (70) |
| Moderate | 179 (38) | 25 (16) |
| Mild | 191 (41) | 12 (8) |
| First CRP (n=428) | 487 (214, 894) | 538 (315, 1072) | 0.12 |
| Glucose | 116 (100, 164) | 138 (113, 188) | <0.001 |
Graph showing disease severity on admission by Race/Ethnicity (upper). Notice the predominance of severe disease (orange) in Hispanic patients. Graph showing Race/Ethnicity Distribution by Week (lower). Notice the gradual increase and predominance of Hispanic patients (orange) in the later weeks of the study period compared to Black (blue) and White (green) patients.

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### 289. Post COVID Syndrome Cohort Characterization

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**Session:** P-14. COVID-19 Complications, Co-infections, and Clinical Outcomes

**Background.** Post COVID Syndrome (PCS) is significant morbidity following COVID-19. This study aims to identify biomarkers that predict PCS in a Gulf Coast cohort known for poor health outcomes.

**Methods.** Since March 2020 the study Collection of Serum and Secretions for SARS CoV-2 Countermeasure Development (aka ClinSeqSer) has been enrolling subjects with confirmed acute COVID-19, with initial visit at 1 month and follow up every three months from symptom onset. At follow-up, subjects complete symptom questionnaire, physical examination, nasopharyngeal swab/saliva collection, blood draw. Subjects with >= one symptom new since COVID are PCS, remainder are Non-PCS experienced at initial one month visit and six months or longer. Univariate and bivariate analysis was carried out to study significant associations of currently available dataset (N=60).

**Figure 1. Post-COVID Symptoms**

Included if "new since covid". For 60 subjects consented post-covid with completed questionnaire, results were analyzed. Most common symptoms reported were fatigue/tiredness or exhaustion (52%), muscle aches (38%), difficulty concentrating (33%) and headache (32%) as the most common symptoms during one month prior to their initial follow-up visit. The persistent symptoms experienced for six months or longer were fatigue/tiredness or exhaustion (25%), forgetfulness (22%), muscle aches (18%), and sleep difficulties (18%).

**Results.** Cohort is 36 (60%) female, 24 (40%) male, age group of 49 (82%) 18-64 years, 11 (18%) 65+ years, 33 (55%) African American, 27 (45%) Caucasian. Median follow-up time after symptom onset: 290 days. Study cohort reported fatigue (32%), myalgias (38%), difficulty concentrating (33%), headache (32%) as most common symptoms during first month from initial symptom onset. Persistent symptoms (>6 months) are fatigue (25%), forgetfulness (22%), myalgias (18%), sleep difficulties (18%). Bivariate analysis shows that gender (female, P=0.04), past stroke/transient ischemic attack (P=0.04), deep venous thrombosis (P=0.02), abnormal kidney function (P=0.01) associate with PCS. Convalescent antibodies (ReSARS N IgG, S-RBD IgG) were measured and percentage inhibition of ACE2 spike interaction was recorded. Plasma inflammatory protein levels were measured using multiplex ELISA and Proximity Extension Assay technology during follow-up visit. Increased antibody ReSARS N IgG (2.91, 0.74-10.93; P=0.02) response and higher convalescent IL-10 (P=0.04) was associated with PCS. Percent inhibition of ACE2: spike interaction was not associated (P=0.79) with PCS. Nasal swab/saliva SARS-COV-2 sequencing has not identified a specific SARS-CoV-2 virus mutation predictive of PCS.

**Table 1. Demographic and Clinical Characteristics**

| Variables | PCS | Non-PCS | OR (95% CI) | p-value |
|-----------|-----|---------|-------------|---------|
| Age groups (years), 18-64 | 36 (60)% | 12 (18)% | 0.40 (0.11, 1.46) | 0.3638 |
| Gender, female | 27 (45)% | 9 (13)% | 1.59 (0.52, 4.80) | 0.4272 |
| Race, Black | 11 (18)% | 1 (1.6%) | 0.08 (0.01, 0.68) | 0.0382 |
| Clinical severity during hospitalization, Severe | 5 (8.3%) | 1 (1.6%) | 5.0 (0.99, 25.9) | 0.0479 |
| Heart attack | 3 (4.9%) | 1 (1.6%) | 3.0 (0.57, 16.0) | 0.2341 |
| Stroke or Transient ischemic attack | 4 (6.7%) | 2 (3.3%) | 2.0 (0.33, 12.8) | 0.354 |
| Blood clot in lung (pulmonary embolism) | 4 (6.7%) | 2 (3.3%) | 2.0 (0.33, 12.8) | 0.354 |
| Blood clot in leg (deep venous thrombosis) | 2 (3.3%) | 1 (1.6%) | 2.0 (0.33, 12.8) | 0.354 |
| Abnormal kidney function | 4 (6.7%) | 2 (3.3%) | 2.0 (0.33, 12.8) | 0.354 |
| Abnormal lung function | 3 (4.9%) | 1 (1.6%) | 3.0 (0.57, 16.0) | 0.2341 |
| Abnormal liver function | 0 | 0 | 0 | 0 |
| Abnormal heart function | 1 (1.6%) | 0 | 0.058 (0.01, 0.99) | 0.4899 |
| High blood pressure (hypertension) | 20 (33.3%) | 8 (13.3%) | 0.46 (0.13, 1.61) | 0.2712 |

The bivariate analysis results showed that the gender (female, P=0.0354), history of stroke or transient ischemic attack (P=0.0382), chest pain from narrow heart vessels (P=0.0479), deep venous thrombosis (P=0.0241) and abnormal kidney function (P=0.0142) were associated with Post-COVID syndrome.

**Table 2. Antibodies and ACE2 spike inhibition.**

| Variables | Mean | Median | Upper Quartile | Lower Quartile | Std Dev | P-value |
|-----------|------|--------|----------------|---------------|---------|---------|
| N IgG (U/mL) | 5.60 | 2.81 | 15.25 | 0.74 | 12.31 | 0.0189 |
| S-RBD (U/mL) | 7.62 | 7.1 | 4.48 | 3.94 | 8.05 | 0.3075 |

The convalescent antibodies, ReSARS N IgG and S-RBD IgG were measured in U/mL and percentage inhibition of ACE2 spike interaction was recorded during follow-up visit for PCS vs Non-PCS subjects. The increased antibody ReSARS N IgG (2.91, 0.74-10.93; P=0.0159) response was associated with Post-COVID syndrome. Percent inhibition of ACE2: spike interaction was not associated (P=0.7932) with PCS.