Title
ICU admission Risk Factors of Latinx/Hispanic COVID-19 patients at a US Mexico Border Hospital

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making tools, rotation advice, and the application and match process. Mentors were instructed to meet with their mentees and to check-in weekly. Following the rotation, students were sent an online anonymous survey consisting of 6 multiple choice and 3 free response questions. Simple descriptive statistics and qualitative methods were employed for data analysis. Initial coding was performed independently by two study authors and then reviewed by a third author with experience in qualitative methodology. Suggestions were merged via consensus into a final code set that was used for thematic analysis.

**Results:** Six audition rotations occurred over the study period. Of the 47 students, 74% (n=35) responded to our survey. 97% (n=34) of participants recommended continuing this program, 91% (n=32) rated this program helpful, and 64% (n=16) stated that this improved their success on the rotation. Preliminary qualitative analysis of students’ responses revealed the themes in Figure 1.

**Conclusion:** Preliminary data suggests that students found having a mentor during their audition rotations was meaningful. We believe students can benefit from a resident-driven mentorship program during their auditions.

**Figure 1:**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Student Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clerkship Success</td>
<td>&quot;I feel like the first week of the clerkship and be provided me with some useful information on how to take the rest of the rotation. He helped me understand what my role should be.&quot;</td>
</tr>
<tr>
<td>Application Advice</td>
<td>&quot;Getting outside feedback from someone who has been recently experienced with some challenges and found their way through those hurdles was just what I needed.&quot;</td>
</tr>
<tr>
<td>Enhanced Medical Knowledge</td>
<td>&quot;They can teach from a supervising role because they went through their year and learned from their own mistakes.&quot;</td>
</tr>
<tr>
<td>Team Comradeship</td>
<td>&quot;It can be hard adjusting to a new environment and a friendly face definitely helps.&quot;</td>
</tr>
<tr>
<td>Program Insights</td>
<td>&quot;The mentors were very good for general information and also to get a feel for the type of program.&quot;</td>
</tr>
<tr>
<td>Safe Space</td>
<td>&quot;It was helpful to have support from someone who truly wanted me to succeed and was willing to help me through the challenges I faced.&quot;</td>
</tr>
</tbody>
</table>

**Figure 1.**

**Figure 2.**

**13 ICU admission Risk Factors of Latinx/Hispanic COVID-19 patients at a US Mexico Border Hospital**

Andrew LaFree; Christian A. Tomaszewski; Christopher John Coyne; Faith C. Quenzer

**Presenter: L.E. Gomez**

**Objectives:** To describe the association of demographics of sex, comorbidities, age with the risk of severe (Coronavirus Disease 2019) COVID-19 requiring intensive care unit level of care, and death in a primarily Latinx/Hispanic U.S.-Mexico border hospital operating at surge capacity.

**Background:** According to the CDC, the Latinx/Hispanic population in the U.S. have been particularly affected by severe COVID-19 complications and high mortality rates. Border hospitals and their emergency departments (ED) are particularly vulnerable to widespread communicable respiratory infections and severe COVID-19 complications and poor outcomes such as surges of hospitalizations and death. Multiple factors such as inadequate healthcare infrastructure in border areas, access to preventative healthcare and subsequently higher prevalence of comorbidities that increase the risk for severe COVID-19 in the Latinx/Hispanic patient population overall. At the U.S.-Mexico border region, there is a paucity of research and data regarding how COVID-19 affects this predominantly Latinx/Hispanic community. Our study seeks to identify demographic, and clinical risk factors that make this specific community vulnerable to severe COVID-19 complications such as intensive care unit (ICU) utilization and death.

**Methods:** This was a retrospective, observational chart review of 156 hospitalized COVID-19 patients during a surge at a border hospital. Adult patients (> 18 years) diagnosed with SARS-CoV-2 and met admission criteria from April 10, 2020 to May 30, 2020 were included. Excluded were pediatric patients (< 18 years of age), patients who did not consent for treatment, pregnant women, patients who did not meet the above inclusion criteria. Descriptive statistics of sex, age categories of 18-49, 50-64, and > 65 years or older, BMI, presence of at least one comorbidity (coronary artery disease, hypertension, diabetes, cancer/lymphoma, current
use of immunosuppressive drug therapy, chronic kidney
disease/dialysis, or chronic respiratory disease), along with
complications were done. Multivariate regression models
were produced from the most significant variables and factors for
ICU admission. The final, reduced regression model, a p-value
<0.05 was considered statistically significant and confidence
intervals were reported at a level 95%.

Results: Of the 156 hospitalized patients, 63.5% (99)
were male, 132 (84.6%) admitted for respiratory failure,
average age was 67.2 (+/-12.2). There were 71 (45.5%)
patients who required intensive care. Those > 65 years old had
a higher frequency of ICU admission. Seventy-nine percent
(49) of the ICU patients had a BMI over 25. Most common
comorbidities were diabetes, hypertension, and coronary
artery disease/hyperlipidemia. The regression model showed
that males had a 4.4 (95% CI 1.576, 12.308) odds of ICU
admission (p=0.0047). Those who developed acute kidney
injury (AKI) and BMI 25-29.9 were strong predictors of ICU
admission (p<0.001 and p=0.0020, respectively). No single
comorbidity was associated with ICU admission. However,
those with at least one comorbidity, there was 1.984 increased
odds (95% CI 1.313, 2.998) of an ICU admission. Of those
admitted in the ICU, 72% (16) died.

Conclusion: The Latinx/Hispanic border populations
have a high prevalence of comorbidities and potential
complications that increase their risk for COVID-19
complications that lead to ICU admissions and death.

14 Effectiveness of face mask mandates in
4 suburban US communities during the
SARS-CoV2 Omicron surge

Julie McCarthy; Robert Partridge; Stephen K. Epstein;
Tiffany Zike; Timothy McDonald

Objectives: To evaluate the effectiveness of face mask
mandates in four suburban communities in the metropolitan
Boston area during the SARS-CoV2 Omicron surge.

Background: Face mask mandates have been
implemented by local, state and national governments to limit
the transmission of illness during the SARS-CoV2 pandemic.

Methods: A retrospective review of state reported,
PCR positive cases of SARS-CoV2 and vaccination rates in
four communities during the Omicron surge from 01/11/21-
01/31/22. Data was analyzed using descriptive statistics.

Results: Two communities had a face mask mandate
in place for all indoor public spaces throughout the study
period, and two communities did not. Brookline (population
59,180, fully vaccinated rate per capita 62%) and Newton
(population 88,593, vaccination rate 87%) implemented face
mask mandates prior to the surge on 08/27/21 and 09/02/21,
respectively, that remained in place through 02/18/22.
Needham (population 31,248, vaccination rate 93%) and
Framingham (population 72,308, vaccination rate 76%) issued
mask recommendations but not a mask mandate. SARS-CoV2
percent positive rate per 100,000 population, reported weekly
for each community is shown in Figure 1. Prior to Omicron,
on 10/14/21 percent positive rates were 1% or less in all four
communities. Percent positivity at the peak of Omicron was
lower in Newton (13.18%) and Brookline (12.28%) than in
Needham (14.92%) and Framingham (22.38%). Brookline had
the lowest peak positivity rate and the lowest vaccination rate.
Percent positivity also peaked and declined earlier in both
communities with mask mandates.

Conclusion: In this study, suburban communities with
mask mandates had a lower SARS-CoV2 peak percent
positivity rate and an earlier peak than communities
without mask mandates. Face mask requirements in indoor
public spaces may reduce transmission of SARS-CoV2
during variant surges, and may be particularly effective in
communities with lower vaccination rates.

Figure 1. Weekly SARS-CoV2 PCR positive cases per
100k population in 4 suburban Boston communities
December 2020-February 2022.

15 Proportion of Emergency Department Visits
for Alcohol Abuse Increased After the
Arrival of COVID-19

Barnet Eskin; Claire DeLong; John R. Allegra

Objectives: The goal of our study was to determine
whether there was a change in the proportion of ED visits for
alcohol abuse following the arrival of COVID-19.

Background: In March of 2020, COVID-19 arrived
in the New York Metropolitan area. Total ED visits
decreased markedly, likely because of fear of exposure to
the virus as well as social isolation mandates. Concerns
have been raised regarding the possible adverse effects
that COVID-19 may have on increased abuse of alcohol.
COVID-19 triggered bouts of anxiety, isolation from peers,
and increased family tensions because of job disruptions
and quarantining within families. A CDC study showed
that despite decreased total ED visits, compared to 2019,
the proportion of ED mental health related visits in 2020
increased. The goal of our study was to determine whether