MORE Initiative
Maternal Opioid Recovery Effort

Opioid Webinar Series
Welcome!

PLEASE ENTER YOUR AUDIO PIN ON YOUR PHONE SO WE ARE ABLE TO UN-MUTE YOU FOR DISCUSSION.

IF YOU HAVE A QUESTION, PLEASE ENTER IT IN THE QUESTION BOX OR RAISE YOUR HAND TO BE UN-MUTED.
Welcome!

THIS WEBINAR IS BEING RECORDED.

PLEASE PROVIDE FEEDBACK ON OUR POST-WEBINAR SURVEY.
FPQC & MORE Initiative Update
“Maternal Opioid Recovery Effort”

William M. Sappenfield, MD, MPH, CPH
Professor and Director
Florida Perinatal Quality Collaborative
USF College of Public Health
“Obstetric providers and hospitals are the first health care contact for most mothers with Opioid Use Disorder (OUD) and need to lead the effort to screen, assess, and refer these mothers as well as provide for their obstetrical needs.”
Drug-related deaths are the leading cause of death to mothers during pregnancy & within one year of birth.

Drug-related deaths account for 1 in 4 of these deaths.

Most deaths (75%) occur after the baby is born and mother has been discharged.
Related Issues

- Stigma and bias by professionals make it difficult for patients to discuss their condition and get help.
- More than 30% of women with OUD have underlying depressive issues that complicate care.
- Women with OUD who stop medication-assisted therapy without other support services are at high risk of relapse.
Recommendations

• Screen all pregnant women for substance use.
• Assess patient’s prescription history through PDMP.
• If unable to provide care, provide direct referral to another OB provider for compassionate and comprehensive care.
• A plan of safe care should be developed with others.
• Provide direct referral to medication-assisted treatment.
• Women with OUD should receive a prescription and education on Naloxone.
• Coordinate care and care plan with Pediatric team.
FLORIDA PERINATAL QUALITY COLLABORATIVE
MATERNAL OPIOID RECOVERY EFFORT
FOUR-PART VIDEO SERIES

New at http://fpqc.org/morevideos!!

• Screening, Brief Intervention, and Referral to Treatment (SBIRT): A Universal Tool for Pregnant Women
• Linking Mothers & Babies to Services: Plans of Safe Care (POSC)
• Getting Real: Taking the First Steps Toward Recovery
• From Judgment to Healing: The Impact of Stigma
Available Education Materials

Opioid Use During Pregnancy

Florida Pregnancy-Associated Mortality Review (PAMR)

March 2020

Available Education Materials

Urgent PAMR Message to Providers and Hospitals

Opioid use during pregnancy is a common challenge and is associated with preterm birth and perinatal death. Providers are strongly encouraged to address this issue by identifying and referring patients to appropriate resources.

Florida PAMR Findings:
- Opioid use is a common challenge in pregnancy and is associated with preterm birth and perinatal death.
- The use of opioids during pregnancy may increase the risk of neonatal abstinence syndrome (NAS) and other complications.

PAMR Recommendations:
- Prevention and education:
  - Providing education on the risks of opioid use during pregnancy is crucial.
  - Encouraging safe opioid use during pregnancy through education and support.

Risk Factors:
- Age, race/ethnicity, and socioeconomic status are risk factors for opioid use during pregnancy.
- History of substance use disorder (SUD), including opioid use.
- Mental health disorders, such as depression and anxiety.

Language Matters

Language is powerful — especially when talking about addictions. Understanding language preferences can improve conversations.

"You can save a mother’s life.”

For more information and resources from FPQC’s Maternal Opioid Recovery Effort (MORE) visit

Available Education Materials

Some risks of drinking and drug use during pregnancy

Fetal alcohol spectrum disorders
Birth defects
Low birth weight
Premature birth
Developmental and behavior problems

Opioid safety and how to use naloxone

In Florida, drug-related deaths are the leading cause of death (1 in 4) for women during pregnancy and one year postpartum.

DO YOU KNOW?

FPQC website

What every OB provider needs to know to save a mother’s life

Available Education Materials

FPQC website

NATIONAL COUNCIL FOR THE CIVIC JUVENILE JUSTICE

Important Resource for OB Providers

FPQC Florida’s Maternal Opioid Recovery Effort (MORE)

Key Steps to Improve Maternal Outcomes

NURSE-FPQC

Supporting families, facilitating access to care, and improving maternal health outcomes.

Available Education Materials

FPQC website

Partnering to Improve Health Care Quality for Mothers and Babies

Available Education Materials

FPQC website

Available Education Materials

FPQC website

Available Education Materials

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Available Education Materials

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Available Education Materials

FPQC website

Available Education Materials

FPQC website

Available Education Materials

FPQC website
A Book of Hope for Moms with OUD

Now available at [FPQC.org/opioids](http://FPQC.org/opioids)
Engaging Women with OUD in the COVID-19 Crisis: Tools and Principles

Mishka Terplan, MD, MPH
Senior Researcher, Friends Research Institute
Consultant, National Center on Substance Abuse and Child Welfare (NCSACW)
Engaging Women With Opioid Use Disorder in the COVID-19 Crisis: Tools and Principles

Mishka Terplan MD MPH FACOG DFASAM
Associate Medical Director, Friends Research Institute
Adjunct Faculty, UCSF, National Clinical Consultation Center
Addiction Medicine Specialist, Virginia Medicaid

@Do_Less_Harm

FPQC June 2020
Brief History of SARS-CoV-2/COVID-19

- Novel corona virus identified December 2019 as cause of pneumonia cluster in Wuhan – led to rapid outbreak in China
- Designated severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) – February 2020 WHO designated the disease COVID-19 (coronavirus disease 2019)
- WHO Pandemic early March

- Mode of transmission: respiratory droplets (direct or indirect – from infected surfaces)
- Household attack rates 10%, healthcare and community <1%
- Reproduction number Ro=2-3
- Incubation Period - 14 days
- Symptoms – Cough, Fever, SOB, Chills, Muscle Pain, Sore Throat, New Loss of Taste or Smell
- Illness Spectrum
  - 81% Mild (mild or no pneumonia)
  - 14% Severe (dyspnea, hypoxia, or >50% lung involvement)
  - 5% Critical (respiratory failure, shock)
  - Death Rate – 3.4% globally (range 0.6 South Korea -12% Wuhan time delay analysis)
- Risk Factors: Age and underlying medical comorbidities (pulmonary)
  - However 20% of hospitalizations are adults 20-44
**Prevalence of Asymptomatic SARS-CoV-2 Infection**

*Annals of Internal Medicine*  
Daniel P. Oran, AM, and Eric J. Topol

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has spread rapidly throughout the world since the first cases of coronavirus disease 2019 (COVID-19) were observed in December 2019 in Wuhan, China. It has been suspected that infected persons who remain asymptomatic play a significant role in the ongoing pandemic, but their relative number and effect have been uncertain. The authors sought to review and synthesize the available evidence on asymptomatic SARS-CoV-2 infection. Asymptomatic persons seem to account for approximately 40% to 45% of SARS-CoV-2 infections, and they can transmit the virus to others for an extended period, perhaps longer than 14 days. Asymptomatic infection may be associated with subclinical lung abnormalities, as detected by computed tomography. Because of the high risk for silent spread by asymptomatic persons, it is imperative that testing programs include those without symptoms. To supplement conventional diagnostic testing, which is constrained by capacity, cost, and its one-off nature, innovative tactics for public health surveillance, such as crowdsourcing digital wearable data and monitoring sewage sludge, might be helpful.

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**Table. Summary of SARS-CoV-2 Testing Studies**

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Tested, n</th>
<th>SARS-CoV-2 Positive, n (%)</th>
<th>Positive but Asymptomatic, n (%)</th>
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<tbody>
<tr>
<td>Iceland residents (6)</td>
<td>13 080</td>
<td>100 (0.8)</td>
<td>43 (43.0)</td>
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<tr>
<td>Vo', Italy, residents (7)</td>
<td>5155</td>
<td>102 (2.0)</td>
<td>43 (22.2)</td>
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<td>Diamond Princess cruise ship passengers and crew (8)</td>
<td>3711</td>
<td>712 (19.2)</td>
<td>331 (46.5)</td>
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<tr>
<td>Boston homeless shelter occupants (9)</td>
<td>408</td>
<td>147 (36.0)</td>
<td>129 (38.7)</td>
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<tr>
<td>New York City obstetric patients (11)</td>
<td>214</td>
<td>33 (15.4)</td>
<td>29 (13.5)</td>
</tr>
<tr>
<td>U.S.S. Theodore Roosevelt aircraft carrier crew (12)</td>
<td>4954</td>
<td>856 (17.3)</td>
<td>500 (58.4)</td>
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<tr>
<td>Japanese citizens evacuated from Wuhan, China (2)</td>
<td>565</td>
<td>13 (2.3)</td>
<td>4 (30.8)</td>
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<tr>
<td>Greek citizens evacuated from the United Kingdom, Spain, and Turkey (14)†</td>
<td>783</td>
<td>40 (5.1)</td>
<td>35 (87.5)</td>
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<tr>
<td>Charles de Gaulle aircraft carrier crew (13)</td>
<td>1760</td>
<td>1046 (59.4)</td>
<td>500 (47.8)</td>
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<td>Los Angeles homeless shelter occupants (10)</td>
<td>178</td>
<td>43 (24.2)</td>
<td>27 (62.8)</td>
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<td>King County, Washington, nursing facility residents (15)</td>
<td>76</td>
<td>48 (63.2)</td>
<td>3 (4.3)</td>
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<tr>
<td>Arkansas, North Carolina, Ohio, and Virginia inmates (16)</td>
<td>4693</td>
<td>3277 (69.8)</td>
<td>3146 (96.0)</td>
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<tr>
<td>New Jersey university and hospital employees (17)</td>
<td>829</td>
<td>41 (4.9)</td>
<td>27 (65.9)</td>
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<tr>
<td>Indiana residents (18)</td>
<td>4611</td>
<td>78 (1.7)</td>
<td>35 (44.8)</td>
</tr>
<tr>
<td>Argentine cruise ship passengers and crew (19)</td>
<td>217</td>
<td>128 (59.0)</td>
<td>104 (81.3)</td>
</tr>
<tr>
<td>San Francisco residents (29)</td>
<td>4160</td>
<td>74 (1.8)</td>
<td>39 (52.7)</td>
</tr>
</tbody>
</table>
What makes this virus so dangerous

- Novel – Information still evolving
- Virus is stable in aerosols for hours
- Highly transmissible – average infection > 2 people
- Resource intensive (for serious illness 2-3 week ICU admission)
- Limited prevention and no treatment (supportive care only)

- Therefore: Social Distancing, Face Masks, and Hand washing
Association of Stay-at-Home Orders With COVID-19 Hospitalizations in 4 States

In analyses of the effectiveness of response measures to the outbreak of coronavirus disease 2019 (COVID-19), most studies have used the number of confirmed cases or deaths. However, case count is a conservative estimate of the actual number of infected individuals in the absence of community-wide serologic testing. Death count is a lagging metric and insufficient for proactive hospital capacity planning. A more valuable metric for assessing the effects of public health interventions on the health care infrastructure is hospitalizations. As of April 18, 2020, governors in 42 states had issued statewide executive “stay-at-home” orders to help mitigate the risk that COVID-19 hospitalizations would overwhelm their state’s health care infrastructure. This study assessed the association between these orders and hospitalization trends.

Methods | In March 2020, we began collecting data on cumulative confirmed COVID-19 hospitalizations from each state’s department of health website on a daily basis. Among states issuing a statewide stay-at-home order, we identified states with at least 7 consecutive days of cumulative hospitalization data for COVID-19 (including patients currently hospitalized and those discharged) before the stay-at-home order date and at least 17 days following the order date. Because the median incubation period of COVID-19 was reported to be 4 to 5.1 days1 and the median time from first symptom to hospitalization was found to be 7 days,2 we hypothesized that any association between stay-at-home orders and hospitalization rates would be evident after 12 days (median effective date). States included in this sample were Colorado, Minnesota, Ohio, and Virginia. Among the 4 states meeting the inclusion criteria, the earliest date with data on hospitalizations was March 10. All states were observed through April 28. We fit the best exponential growth function to cumulative hospitalization data in each state for dates up to and including the median effective date of that state’s stay-at-home order. We computed 95% prediction bands on the exponential fit line to determine if the observed number of hospitalizations fell within the interval. We then examined whether the observed cumulative hospitalizations for dates after the median effective date deviated from the projected exponential growth in cumulative hospitalizations. In an additional analysis, a linear growth function was fit to cumulative hospitalization data for dates up to and including the median effective date, and goodness of fit was assessed with an R² comparison. All analyses were performed using Microsoft Excel version 14.1.

Results | In all 4 states, cumulative hospitalizations up to and including the median effective date of a stay-at-home order closely fit and favored an exponential function over a linear fit (R² = 0.973 vs. 0.995 in Colorado; 0.965 vs. 0.865 in Minnesota; 0.98 vs. 0.803 in Ohio; 0.994 vs. 0.775 in Virginia) (Table). However, after the median effective date, observed hospitalization growth rates deviated from projected exponential growth rates with slower growth in all 4 states. Observed hospitalizations consistently fell outside of the 95% prediction bands of the projected exponential growth curve (Figure).

For example, Minnesota’s residents were mandated to stay at home starting March 28. On April 13, 5 days after the median effective date, the cumulative projected hospitalizations were 988 and the actual hospitalizations were 361. In Virginia, projected hospitalizations 5 days after the median effective date were 2335 and actual hospitalizations were 1048.

Discussion | In 4 states with stay-at-home orders, cumulative hospitalizations for COVID-19 deviated from projected best-fit exponential growth rates after these orders became effective. The deviation started 2 to 4 days sooner than the median effective date of each state’s order and may reflect the use of a median incubation period for symptom onset and time to hospitalization to establish this date. Other factors that potentially decreased the rate of virus spread and subsequent hospitalizations include school closures, social distancing guidelines, and general pandemic awareness. In addition, economic insecurity and loss of health insurance during the pandemic may have also decreased hospital utilization. Limitations of the study include that these other factors could not be modeled in the analysis and that data on only 4 states were available.
Identifying airborne transmission as the dominant route for the spread of COVID-19

Reny Zhang*, Yixin Lu*, Ann L. Zhang, Yuxin Wang†, and Mario J. Molina*†

School of Atmospheric Sciences, Texas A&M University, College Station, TX 77843; Department of Chemistry, Texas A&M University, College Station, TX 77843; Department of Chemistry, College of Natural Sciences, Texas A&M University, Houston, TX 77004; and Department of Chemistry and Biochemistry, University of California San Diego, La Jolla, CA 92037.

Contributed by Mario J. Molina, May 16, 2020; reviewed by Manish Shankar and Yong Zhu.

Fig. 3. Contrasting the trends of new infections between NYC and the United States. Daily new confirmed cases in (A) NYC and (B) the United States. The dotted lines represent linear fitting to the data between April 17 and May 9 in NYC and between April 4 and May 9 in the United States. In 8, the number in NYC was subtracted from that in the United States. The vertical lines label the dates for social distancing, stay-at-home orders, and mandated face-covering.

Fig. 5. Mitigation paradigm. Scenarios of virus transmission under the distancing/quarantine/isolation measure only (path a), the measures with distancing/quarantine/isolation followed by face covering (path b), and the measures with simultaneous face covering and distancing/quarantine/isolation (path c). The short-dashed arrows label possible remnants of virus transmission due to circumstances when the measure is not possible or disobeyed and/or imperfection of the measure.
Community Use Of Face Masks And COVID-19: Evidence From A Natural Experiment Of State Mandates In The US

ABSTRACT State policies mandating public or community use of face masks or covers in mitigating novel coronavirus disease (COVID-19) spread are hotly contested. This study provides evidence from a natural experiment on the effects of state government mandates in the US for face mask use in public issued by 15 states plus DC between April 8 and May 15. The research design is an event study examining changes in the daily county-level COVID-19 growth rates between March 31, 2020 and May 22, 2020. Mandating face mask use in public is associated with a decline in the daily COVID-19 growth rate by 0-9, 1-1.4, 1.7, and 2.0 percentage points in 1-5, 6-10, 11-15, 16-20, and >21 days after signing, respectively. Estimates suggest as many as 230,000–450,000 COVID-19 cases possibly averted by May 22, 2020 by these mandates. The findings suggest that requiring face mask use in public might help in mitigating COVID-19 spread. [Editor’s Note: This Fast Track Ahead Of Print article is the accepted version of the peer-reviewed manuscript. The final edited version will appear in an upcoming issue of Health Affairs.]
COVID-19 Considerations for People with OUD

- High risk of co-morbidities that may increase severity of COVID-19
  - COPD, Cirrhosis, HIV
  - Smoking

- Overlap between symptoms of opioid withdrawal and COVID-19 infection

- Risk of drug overdose due to social distancing/isolation, drug supply disruption, reduced access to community-based naloxone distribution

- Increase in other substance use including alcohol

- Barriers to accessing treatment due to illness, quarantine, and financial resources for both patients and providers
What Impact Has COVID-19 Had on Outpatient Visits?

April 23, 2020
Ateez Mehrotra, Michael Chernew, David Linetsy, Hilary Hatch, and David Cutler

As the number of in-person visits dropped, telehealth visits increased. But the increase in telehealth visits only partially offset the drop in in-person visits.

The decline in visits was generally larger among surgical and procedural specialties and smaller in other specialties such as adult primary care, obstetrics/gynecology, oncology, and behavioral health.
Prescription Fill Patterns for Commonly Used Drugs During the COVID-19 Pandemic in the United States

Conflicting information regarding the benefits of hydroxychloroquine/chloroquine and azithromycin in coronavirus disease 2019 (COVID-19) treatment and hypothetical concerns for drugs, such as angiotensin-converting enzyme (ACE) inhibitors and angiotensin receptor blockers (ARBs), have challenged care during the pandemic. However, limited data are available about how prescription of these therapies has changed. The objective of this exploratory analysis was to evaluate prescription patterns of these therapies, along with other commonly used drugs for reference, in the United States during the COVID-19 pandemic. We hypothesized that the prescription of hydroxychloroquine/chloroquine and azithromycin would exceed historical estimates while ACE inhibitor/ARB use would be reduced.

Methods | Trends in mean weekly prescriptions dispensed between February 16 and April 25, 2020, of hydroxychloroquine/chloroquine, azithromycin, and the top 10 drugs based on total claims in 2019, which included the most common ACE inhibitor (lisinopril) and ARB (losartan), were compared with mean weekly prescriptions dispensed from February 17 to April 27, 2019 (Table). We used all-payer US pharmacy data from 58332 chain, independent, and mail-order pharmacies across 4421 zip codes in 50 states, reflecting approximately 17 million de-identified claims. Prescriptions of hydroxychloroquine/chloroquine were also examined based on fill quantity (≤28 tablets, 28-60 tablets, or >60 tablets). Pharmacy claims were assigned weights to match prescription data from the Medical

<table>
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<tr>
<th>Drug</th>
<th>February 16-22</th>
<th>February 23-29</th>
<th>March 1-7</th>
<th>March 8-14</th>
<th>March 15-21</th>
<th>March 22-28</th>
<th>March 29-Apr 4</th>
<th>April 5-11</th>
<th>April 12-18</th>
<th>April 19-25</th>
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<td>Hydroxychloroquine/chloroquine (continued)</td>
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<td>Weekly fill volume</td>
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Table: Estimates of Total Weekly Fills and Relative Percentage Change From 2019 Estimates of Commonly Prescribed Drugs, Azithromycin, and Hydroxychloroquine/Chloroquine

Table: Estimated absolute volume of total weekly fills in 2020.
Psychological Distress and Loneliness Reported by US Adults in 2018 and April 2020

Coronavirus disease 2019 (COVID-19) introduced stressors to mental health, including loneliness stemming from social isolation, fear of contracting the disease, economic strain, and uncertainty about the future. We fielded a national survey measuring symptoms of psychological distress and loneliness among US adults in April 2020 and compared results with national data from 2018.

Methods

We fielded the Johns Hopkins COVID-19 Civic Life and Public Health Survey from April 7 to April 11, 2020, using NORC’s AmeriSpeak Panel. AmeriSpeak is a probability-based panel designed to be representative of the US adult population. The panel is sourced from NORC’s area probability sample and from a US Postal Service address-based sample covering 99% of US households. The panel has a recruitment rate of 34% and includes approximately 35,000 members. The sample for the Johns Hopkins survey was drawn from this panel, and the survey was administered online. NORC obtained informed consent prior to enrolling individuals in the panel. The Johns Hopkins Bloomberg School of Public Health institutional review board deemed this study not human participants research and waived informed consent.

We measured the prevalence of symptoms of serious psychological distress in the overall sample and among demographic subgroups using the Kessler 6 Psychological Distress Scale, with the validated measure of serious distress defined as a score of 3 or higher on the 0-4 scale point. We also measured the proportion of respondents who reported that they always or often feel lonely in response to the item “How often do you feel lonely?” with response options always, often, sometimes, rarely, and never.

We compared the prevalence of serious psychological distress and loneliness by gender, age, race/ethnicity, household income, and living situation in April 2020 with the corresponding measurements from the 2018 National Health Interview Survey (NHIS), which used the Kessler 6 scale among 25,417 adults aged 18 years or older in household interviews. The 2018 NHIS response rate was 64.2%.

For each measure, we calculated proportions and 95% CIs using Stata version 15 (StataCorp). The Johns Hopkins and NHIS survey data were analyzed separately. Analyses of both data sets incorporated survey sampling weights to generate nationally representative estimates.

Results

The survey response rate was 70.4%, with a final sample of 1468 adults aged 18 years or older.

In April 2020, 12.6% (95% CI, 11.6-13.6%) of US adults reported symptoms of serious psychological distress, relative to 3.9% (95% CI, 3.6-4.2%) in 2018 (Figure). Among the subgroups examined, in April 2020, symptoms of psychological distress were higher among women, older adults, non-Hispanic Black adults, lower household income levels, and those living alone or with others.

The corresponding prevalence estimates for these subgroups in 2018 were 3.7% (95% CI, 3.0-4.6%), 7.9% (95% CI, 7.2-8.6%), and 4.4% (95% CI, 3.7-5.4%), respectively. The lowest prevalence of serious psychological distress among the subgroups examined in April 2020 was observed in adults aged 55 years or older (5.3% [95% CI, 4.8-6.0%]). In April 2020, 13.8% (95% CI, 11.4-16.4%) of US adults reported that they sometimes or always felt lonely. The highest prevalence of loneliness was among women, older adults, non-Hispanic Black adults, lower household income levels, and those living alone or with others.

Discussion

The prevalence of reported symptoms of psychological distress among US adults was higher in 2020 during the COVID-19 pandemic than in 2018. This finding builds on prior research documenting psychological distress among healthcare workers responding to COVID-19.

The measure of serious psychological distress derived from the Kessler 6 scale has shown to accurately predict serious mental illness, suggesting acute distress during COVID-19 may transfer to longer-term psychiatric disorders. In April 2020, 13.8% of US adults reported that they always or often felt lonely. In comparison, a national survey using an identical measure of loneliness found that 13% of US adults reported being lonely or often feeling lonely in April and May 2018.

Because loneliness increased only slightly from 2018 to 2020, other factors may be driving psychological distress during the COVID-19 pandemic.

The NORC AmeriSpeak Panel used probability-based recruitment consistent with best-practice standards for survey research, but results may be vulnerable to sampling biases. The degree to which US adults classified as essential workers during the COVID-19 pandemic were represented in the survey sample is unknown. While both measures and sampling methods are designed to be nationally representative of US adults, the sampling weights and recruitment methods and mode of administration varied in the Johns Hopkins April 2020 and NHIS 2018 surveys. There is a potential for selection bias if individuals were more likely to respond to a survey about psychological distress in April 2020 than 2018.

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Author Contributions. Dr McGity had full access to all the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.

Design and drafting. McGity, Pressman, Barry.

Acquisition, analysis, or interpretation of data. All authors.

Drafting of the manuscript. McGity.

Critical revision of the manuscript for important intellectual content. All authors.

Statistical analysis. McGinley, Pressman, Barry.

Obtained funding. McGity, Han, Barry

Administrative, technical, or material support. Han, Barry

Supervision. McGity, Han, Barry.

Conflict of Interest Disclosures. None reported.

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Figure: Psychological Distress Among US Adults Aged 18 Years or Older Overall and by Subgroup, April 2020 vs 2018

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>April 2020 (%)</th>
<th>April 2018 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age group, y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30-44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household income, $</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$35,000-$49,999</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$50,000-$74,999</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$75,000+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living situation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lives alone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lives with others</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Changes in federal regulations

  - “The Office for Civil Rights will exercise its enforcement discretion and will not impose penalties for noncompliance with the regulatory requirements under the HIPAA Rules against covered health care providers in connection with the good faith provision of telehealth during the COVID-19 nationwide public health emergency.”

  - “We emphasize that, under the medical emergency exception, providers make their own determinations whether a bona fide medical emergency exists for purposes of providing needed treatment to patients.”

• **Ryan Haight Act** [https://www.deadiversion.usdoj.gov/coronavirus.html](https://www.deadiversion.usdoj.gov/coronavirus.html)
  - “Accordingly, as of March 16, 2020, and continuing for as long as the Secretary’s designation of a public health emergency remains in effect, DEA-registered practitioners in all areas of the United States may issue prescriptions for all schedule II-V controlled substances to patients for whom they have not conducted an in-person medical evaluation, provided all of the following conditions are met:
    • The prescription is issued for a legitimate medical purpose by a practitioner acting in the usual course of his/her professional practice;
    • The telemedicine communication is conducted using an audio-visual, real-time, two-way interactive communication system; and
  **March 31, 2020 guidance:** DEA will allow waived physicians to initiate buprenorphine using telephonic (audio-only) communication.
  The practitioner is acting in accordance with applicable Federal and State laws.”
COVID-19 General Response(s)

• Primary Response:
  – **Provision of continuing care** via (primarily) remote/tele services

• Under-emphasized:
  – Considerations for people with untreated addiction
  – Providers need to see new patients (either virtually or in-person)

• Lacking attention to “Special Populations”:
  – Women
  – Pregnant people – for whom some in-person visits are essential (ie for prenatal care)
  – People with SUD/OUD – how they are experiencing the pandemic, social isolation, the in-person clinic experience

• Public Health/Public Policy: Balance staff safety and support of remote services with person-centered care
COVID19 Public Health Response

• Regulations eased in support of telehealth services
• Addiction Providers: decrease in volume (extended prescriptions, decreased hours) leads to decrease income
• Prenatal Care Providers: slight decrease in volume (spaced out visits) with no change in clinic income (bundled payment)
• What about co-located services?

• Increased attention to racial inequities (COVID-19 and Birth)
Universal Screening for SARS-CoV-2 in Women Admitted for Delivery

TO THE EDITOR: In recent weeks, Covid-19 has rapidly spread throughout New York City. The obstetrical population presents a unique challenge during this pandemic, since these patients are often febrile on admission. Nasopharyngeal swabs were obtained from 230 of the 213 women (99.5%) who did not have symptoms of Covid-19; of these women, 29 (13.7%) were positive for SARS-CoV-2.

This prevalence has limited generalizability to geographic regions with lower rates of infection, it underscores the risk of Covid-19 among asymptomatic obstetrical patients. Moreover, the true prevalence of infection may be underestimated because of false negative results of tests to detect SARS-CoV-2.

The potential benefits of a universal testing approach include the ability to use Covid-19 status to determine hospital isolation practices and bed assignments, inform neonatal care, and guide the use of personal protective equipment. Access to such clinical data provides an important opportunity to protect mothers, babies, and health care teams during these challenging times.

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Figure 1. Symptom Status and SARS-CoV-2 Test Results among 213 Obstetrical Patients Presenting for Delivery.

Testing of Patients and Support Persons for Coronavirus Disease 2019 (COVID-19) Infection Before Scheduled Deliveries

Angela Bianco, M.D., Aiysia B. Backley, M.D., Jessica Overtre, D.D.S., Scott Smilen, M.D., Brian Wagner, M.D., Cheryl Dinglas, M.D., Holly Loudon, M.D., Alan Gasley, M.D., Michael Brodman, M.D., and Joanne Stone, M.D.

OBJECTIVE: To evaluate the rate of coronavirus disease 2019 (COVID-19) infection with the use of universal testing in our obstetric population presenting for scheduled deliveries, as well as the concordance or discordance rate among their support persons during the initial 2-week period of testing. Additionally, we assessed the utility of a screening tool in predicting severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) testing results in our cohort.

METHODS: This was an observational study in which all women who were scheduled for a planned delivery within the Mount Sinai Health system from April 4 to April 15, 2020, were contacted and provided with an appointment for themselves as well as their support persons to undergo COVID-19 testing 7 days before their scheduled delivery. Both the patients and the support persons were administered a standardized screen specific for COVID-19 infection by telephone interview. Those support persons who screened positive were not permitted to attend the birth. All patients and screen-negative support persons underwent SARS-CoV-2 testing.

RESULTS: During the study period, 155 patients and 146 support persons underwent SARS-CoV-2 testing. The prevalence of asymptomatic COVID-19 infection was 15.5% (CI 9.8–21.2%) and 9.6% (CI 4.8–14.4%) among patients and support persons, respectively. The rate of discordance among tested pairs was 7.5%. Among patients with COVID-19 infection, 58% of their support persons also had infection; in patients without infection, fewer than 3.0% of their support persons had infection.

CONCLUSION: We found that more than 15% of asymptomatic maternity patients tested positive for SARS-CoV-2 infection despite having screened negative with the use of a telephone screening tool. Additionally, 58% of their asymptomatic, screen-negative support persons also tested positive for SARS-CoV-2 infection. Alternatively, testing of the support persons of women who had tested negative for COVID-19 infection had a low yield for positive results. This has important implications for obstetric and newborn care practices as well as for health care professionals.

Obstet Gynecol 2020;0:000
DOI: 10.1097/OGC.0000000000003985

The coronavirus disease 2019 (COVID-19) caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) virus has been declared a pandemic by the World Health Organization as of March...
Letters
RESEARCH LETTER
Prevalence of SARS-CoV-2 Among Patients Admitted for Childbirth in Southern Connecticut
Developing an approach to care for pregnancy and childbirth during the coronavirus disease 2019 (COVID-19) crisis is a priority to (1) provide safe care to pregnant women and newborns; and (2) protect health care workers from infection. A study conducted in New York City reported a 13.5% prevalence of asymptomatic infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in women presenting for childbirth.1 On March 30, 2020, an initially asymptomatic woman admitted to the Yale New Haven Health System developed cough and fever soon after childbirth; testing confirmed SARS-CoV-2 infection. This event prompted the development of a SARS-CoV-2 screening and testing program of patients presenting for childbirth; we report the prevalence detected in the first weeks of the program.
Methods | From April 2, 2020, to April 29, 2020, screening and testing of patients admitted for childbirth was initiated at 3 Yale New Haven Health hospitals in southern Connecticut. Screening consisted of questions related to travel, contacts, and symptoms of COVID-19. All patients without a prior diagnosis of COVID-19 underwent SARS-CoV-2 polymerase chain reaction (PCR) testing of nasopharyngeal swabs, with rapid testing available. Patients scheduled for cesarean birth were screened and tested at preoperative visits.
Hospital policies recommended universal mask use on clinical units by clinicians, patients, and support persons and limited each patient to 1 support person visitor for childbirth. For patients with symptoms of COVID-19, clinicians wore N95 respirators and appropriate personal protective equipment (PPE) until results returned, continuing use for patients with positive test results. For patients without symptoms of COVID-19, clinicians followed usual precautions including wearing masks. For the second stage of labor and cesarean or vaginal birth, clinicians wore full PPE and N95 respirators for patients without test results or with positive tests. Excluded from universal testing were patients already diagnosed with COVID-19 and patients not admitted for childbirth. The numbers of positive PCR tests in patients with and without symptoms of COVID-19 were assessed over time. This quality improvement project does not meet the definition of human subjects research; review by the institutional review board was not required.
Results | Seven hundred eighty-two patients presenting for childbirth were screened; 1.5% (22/1482) were previously diagnosed with COVID-19. The remaining 770 patients were tested at admission (Table 1) and 30 of 770 (3.9%) tested positive for SARS-CoV-2 (Table 2). Twenty-two of the 30 who tested positive for SARS-CoV-2 (73.3%) were asymptomatic.

Table 1. Demographics and Characteristics of Patients Tested for SARS-CoV-2 on Admission for Childbirth

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>SARS-CoV-2 PCR result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age x</td>
<td>Positive (n = 30)</td>
</tr>
<tr>
<td>&lt;30</td>
<td>14 (46.7)</td>
</tr>
<tr>
<td>30–34</td>
<td>10 (33.3)</td>
</tr>
<tr>
<td>≥55</td>
<td>6 (20.0)</td>
</tr>
<tr>
<td>Nulliparity</td>
<td>16 (53.3)</td>
</tr>
<tr>
<td>Site of hospital</td>
<td></td>
</tr>
<tr>
<td>Greenwich</td>
<td>8 (26.7)</td>
</tr>
<tr>
<td>Bridgeport</td>
<td>11 (36.7)</td>
</tr>
<tr>
<td>New Haven</td>
<td>11 (36.7)</td>
</tr>
<tr>
<td>Gestation ≥37 weeks at birth</td>
<td>9 (30.0)</td>
</tr>
<tr>
<td>Cesarean delivery⁶</td>
<td>10 (33.3)</td>
</tr>
<tr>
<td>APGAR score</td>
<td></td>
</tr>
<tr>
<td>&lt;7 at 1 minute</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>≥7 at 5 minutes</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Neonatal birth weight, mean (SD)</td>
<td>3370 (621)</td>
</tr>
<tr>
<td>Neonatal SARS-CoV-2 positive test result</td>
<td>0 (0.0)</td>
</tr>
</tbody>
</table>

Abbreviations: COVID-19, coronavirus disease 2019; PCR, polymerase chain reaction; SARS-CoV-2, severe acute respiratory syndrome coronavirus 2.

Table 2. SARS-CoV-2 Test Results for Patients Tested at Admission for Childbirth, Stratified by Symptoms⁷

<table>
<thead>
<tr>
<th>Screening characteristic</th>
<th>SARS-CoV-2 PCR result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age x</td>
<td>Positive (n = 30)</td>
</tr>
<tr>
<td>&lt;30</td>
<td>2 (0.5)</td>
</tr>
<tr>
<td>30–34</td>
<td>20 (4.9)</td>
</tr>
<tr>
<td>≥55</td>
<td>22 (2.9)</td>
</tr>
<tr>
<td>Nulliparity</td>
<td>353 (96.7)</td>
</tr>
<tr>
<td>Site of hospital</td>
<td></td>
</tr>
<tr>
<td>Greenwich</td>
<td>381 (94.1)</td>
</tr>
<tr>
<td>Bridgeport</td>
<td>3 (0.7)</td>
</tr>
<tr>
<td>New Haven</td>
<td>8 (1.0)</td>
</tr>
<tr>
<td>Gestation ≥37 weeks at birth</td>
<td>1 (0.2)</td>
</tr>
</tbody>
</table>

Abbreviations: COVID-19, coronavirus disease 2019; PCR, polymerase chain reaction; SARS-CoV-2, severe acute respiratory syndrome coronavirus 2.

Discussion | These findings suggest a low(<1%) prevalence of positive SARS-CoV-2 test results among asymptomatic patients in a pregnant population outside of the highly endemic region of New York City. During this time period, these hospitals, with approximately 2200 licensed beds, experienced a peak (April 21, 2020) of 759 patients admitted for COVID-19, and among US states, Connecticut had the 3rd highest death rate per capita from COVID-19, indicating a substantially affected region. The increasing prevalence of positive SARS-CoV-2 test results in the asymptomatic population, while the prevalence of symptomatic infections decreased, may indicate that universal testing identifies patients in a convalescent period, in addition to those with subclinical active infection. Although performed in mixed community and academic hospital settings, limitations of the findings include a short duration and a single geographic region.

Approaches to care that balance screening and testing of patients combined with a rationalized approach to use of PPE should be considered for obstetric units.

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Acquisition, analysis, or interpretation of data: Campbell, Tornatore, Lawrence, Iluzzi, Lipkind, Petkler.

Drafting of the manuscript: Campbell, Iluzzi, Lipkind, Petkler.

Critical revision of the manuscript for important intellectual content: All authors.

Statistical analysis: Iluzzi, Lipkind, Petkler.

Administrative, technical, or material support: Tornatore, Petkler.

Supervision: Lawrence, Lipkind, Petkler.

Conflict of Interest Disclosures: None reported.


COVID-19 Considerations for Pregnant People

• There appears to be nothing pregnancy specific for COVID19
  – Maternal risk does not seem greater than general population (this is not H1N1)
  – Fetal/newborn risk does not seem greater (this is not Zika)
  – Not transmitted in breast milk

• Health Care Provider Safety – limited PPE and staffing
"Real Housewives" star Kara Keough Bosworth opens up about the heartbreaking loss of her newborn son

Over the past month, "Real Housewives of Orange County" star Kara Keough Bosworth has been keeping close to the babies she lost would have been born at 25 weeks, 15 days after she was born. She wonders what life would be like. What would her life be like?

In an interview, Casey Bosworth experienced shoulder dystocia and a compressive umbilical cord during her birth, and days later, his parents realized the prognosis they feared: most of the baby suffered severe brain damage and was unlikely to recover.

"I've been lucky to hear from parents that are on the other side of it, or as far as the other side as you can be, and they say it gets better," Bosworth told "Good Morning America," in her first interview since the tragedy. "They say eventually the waves of grief don't feel as overwhelming. They pass every day, and that you have to just get through it — but that you won't alone."

"We had a strong man and he fought every second of his life," added her husband, former professional football player Kyle Bosworth. "Now we've got to figure out how to make his life meaningful.

Inside the 'Olympic effort' to deliver her baby

Bosworth, 35, wanted her second pregnancy to be different than the one she had with her second daughter, Dasher. For starters, she asked her husband, 35, to find out the baby's sex ahead of time, and picked a name that would honor the mother, to whom Casey: "If this is a girl, we're gonna call her Mack. And if a boy, we're gonna call him Mac." Bosworth, who works in customer marketing, said: "We're all joking. Maybe when you're big, somebody'll be like, 'Mac Tuck,' and they'll be a pet name."

Kyle, who works in real estate, came up with Casey, which incorporates the initials of his and Bosworth's siblings' names.
COVID-19 Considerations for Pregnant People

• Policies of Isolation
  – Limiting number of people in delivery room, postpartum and NICU
  – Limiting number of transits per person per day
  – *People with OUD may need more support*

• Policies of Separation
  – Maternal/newborn separation following delivery
  – Limited “rooming in”
  – Limited breast feeding
  – *People with OUD may suffer sequelae of separation more*
  – Child Welfare concerns

• We have prioritized unknown risks of COVID-19 over known harms of isolation and separation
Caring for Women Who Are Planning a Pregnancy, Pregnant, or Postpartum During the COVID-19 Pandemic

Sorria A. Rasmussen, MD, MS; Denise J. Janssen, MD, MPH

Since its recognition in China in December 2019, coronavirus disease 2019 (COVID-19), caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), has rapidly spread throughout the world and become a pandemic. Although considerable data on COVID-19 are available, much remains to be learned about its effects on pregnant women and newborns.

No data are currently available to assess whether pregnant women are more susceptible to COVID-19. Pregnant women are at risk for severe disease associated with respiratory illnesses (eg, AOC2019, influenza).1 But this far, pregnant women with COVID-19 do not appear to be at increased risk for severe disease compared with the general population. Data from China showed that among 147 pregnant women, 8% had severe disease and 1% had critical illness, which are lower rates than observed in the nonpregnant population (44% with severe disease and 6% with critical illness).2 Case series from China consisting primarily of women with third-trimester infection have shown that clinical findings in pregnant women are similar to those seen in the general population.3 Conversely, a small Swedish study reported that pregnant and postpartum women with COVID-19 were more likely to be admitted to an intensive care unit compared with nonpregnant women of similar age.4

Data on pregnant women with COVID-19 in the US are beginning to accumulate. For example, a recent report included 43 pregnant women with COVID-19 who presented for care at 2 hospitals in New York City.5 Although this case series did not include a nonpregnant control group, the proportion of pregnant women with severe disease was similar to that described in nonpregnant adults with COVID-19.6 More information is needed about the effect of pregnancy and comorbidities to understand how they affect clinical outcomes of COVID-19. The US experience might differ from other countries because of the high frequency of comorbidities among pregnant women in the US. The effects of COVID-19 during pregnancy on the neonate are not well understood. Nearly all infections reported from China were during the first and second trimesters, so whether third-trimester SARS-CoV-2 infection might cause birth defects or pregnancy loss is unknown. Some newborns born to mothers with COVID-19 during pregnancy were born preterm or of low birth weight, but whether these outcomes were COVID-19-related is unclear.7 SARS-CoV-2 transmission from a mother to her newborn could occur perinatally, perinatally, or postnatally. Infected newborns tested after birth, results have been negative for SARS-CoV-2. However, symptomatic newborns born to mothers with COVID-19 have been reported to have SARS-CoV-2 infection at a few days of age.8 Whether this was due to perinatal, perinatal, or postnatal transmission is unknown. Recently, a probable case of congenital infection was reported in a newborn born to a woman with a confirmed case of COVID-19 before delivery. A neonatal nasal pharyngeal swab collected on the day of birth prior to skin-to-skin maternal-infant contact was positive.9 The presence of Igg and IgM antibodies in 3 infants born to mothers with COVID-19 during pregnancy was recently reported.9 IgG antibodies freely cross the placenta; however, IgM antibodies do not typically cross the placenta, suggesting the possibility of prenatal transmission of SARS-CoV-2. However, these studies do not provide definitive evidence for intrauterine transmission because cross-reactivity and false-positive IgM test results can occur.9 Transmission can occur through breastfeeding is unknown. SARS-CoV-2 RNA has been detected in breastmilk samples from a single woman with COVID-19, and her infant tested positive for SARS-CoV-2, but whether the infant was infected through breastfeeding is unclear.10 Given the benefits of breast milk, when feasible, breast milk should be fed to infants regardless of maternal COVID-19 status. 

Box. Recommendations for Care of Pregnant Women Confirmed or Suspected to Have Coronavirus Disease 2019 (COVID-19)

- Place a mask on the patient on presentation and isolate in a single-person room with the door closed. Airborne isolation rooms should be used for aerosolizing procedures (ACOG, CDC, SMFM, SOAP).
- Consider separating patients with COVID-19 in one area of the obstetric unit and using a designated team of trained clinicians in these areas (SMFM, SOAP).
- Weigh benefits and risks of magnesium sulfate for fetal neuroprotection or for preeclampsia/intrapartum seizure prophylaxis given potential maternal respiratory depression (SMFM, SOAP).
- Consider adjusting antenatal corticosteroid use for fetal maturation, given the risk of worsening patient outcomes with corticosteroid use in patients with COVID-19 (eg, offer antenatal steroids for patients >34 weeks gestation, weigh risks and benefits and individualize decisions for >34 weeks gestation) (ACOG, SMFM, SOAP).
- Consider early epidural analgesia to mitigate the risks associated with general anesthesia in the setting of an urgent cesarean delivery (SMFM, SOAP).
- Do not alter delivery timing or mode (eg, cesarean delivery, operative vaginal delivery) due to patients’ COVID-19 infection status. However, for women with COVID-19 in the third trimester, it may be reasonable to attempt to postpone delivery to decrease risk of neonatal transmission (ACOG).
- Consider temporary separation of mothers with confirmed COVID-19 from their newborns (ACOG, AAP, CDC).
- Determination of whether to temporarily separate a mother with known or suspected COVID-19 should be made on a case-by-case basis, using shared decision-making (ACOG, CDC).

If temporary separation is chosen, mothers who intend to breastfeed should practice hand and breast hygiene and express their milk. Expressed milk can be fed to the newborn by a healthy caregiver (ACOG, AAP, CDC, SMFM, SOAP).

If separation is not chosen, use other measures to reduce risk of infection, such as physical barriers and face mask use by the mother (AAP, CDC).

Mothers who choose to feed at the breast should wear a face mask and practice hand and breast hygiene before each feeding (AAP, ACOG, CDC, SMFM, SOAP).

Newborns born to mothers with confirmed COVID-19 at the time of delivery should be considered to have suspected COVID-19 and be isolated from healthy newborns (AAP, ACOG, CDC).

Newborns born to mothers with confirmed or suspected COVID-19 at the time of delivery should be tested 24 hours after birth for SARS-CoV-2 and, if negative, again at approximately 48 hours if testing capacity is available (AAP, CDC).

Professional Organization Resources
American Academy of Pediatrics (AAP) initial guidance and FAQs
American College of Obstetricians and Gynecologists (ACOG) practice advisory and FAQs
Centers for Disease Control and Prevention (CDC)
Society for Maternal-Fetal Medicine (SMFM) and Society for Obstetric Anesthesia and Perinatology (SOAP)
COVID-19 is affecting people of color the most. We’re tracking the data in real time.

The COVID Racial Data Tracker is a collaboration between the COVID Tracking Project and the Antiracist Research & Policy Center. Together, we’re gathering the most complete race and ethnicity data on COVID-19 in the United States.

We’ve lost at least 23,253 Black lives to COVID-19 to date.

Black people account for:

13% of the US population

21% of deaths where race is known

This means Black people are dying at a rate more than 1.5 times higher than their population share.

We’ve asked every state to report complete race and ethnicity data. Our Racial Data Dashboard has the latest.

Race and ethnicity data by state

Florida

Florida has reported race data for:

77% CASES
97% DEATHS

Cases and deaths by race

<table>
<thead>
<tr>
<th>Race</th>
<th>Percentage of population</th>
<th>Percentage of cases</th>
<th>Percentage of deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black or African American alone</td>
<td>16%</td>
<td>22%</td>
<td>21%</td>
</tr>
<tr>
<td>Asian alone</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Native Hawaiian and Pacific Islander alone</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>American Indian or Alaska Native alone</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Two or more races</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>White alone</td>
<td>75%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Some other race alone</td>
<td>3%</td>
<td>5%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Florida has reported ethnicity data for:

73% CASES
94% DEATHS

Cases and deaths by ethnicity

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Percentage of population</th>
<th>Percentage of cases</th>
<th>Percentage of deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic or Latino</td>
<td>26%</td>
<td>46%</td>
<td>27%</td>
</tr>
<tr>
<td>Not Hispanic or Latino</td>
<td>74%</td>
<td>54%</td>
<td>73%</td>
</tr>
</tbody>
</table>
Hospitalization and Mortality among Black Patients and White Patients with Covid-19

Eboni G. Price-Haywood, M.D., M.P.H., Jeffrey Burton, Ph.D., Daniel Fort, Ph.D., and Leonardo Seoane, M.D.

ABSTRACT

BACKGROUND

Many reports on coronavirus disease 2019 (Covid-19) have highlighted age- and sex-related differences in health outcomes. More information is needed about racial and ethnic differences in outcomes from Covid-19.

METHODS

In this retrospective cohort study, we analyzed data from patients seen within an integrated delivery health system (Ochsner Health) in Louisiana between March 1 and April 11, 2020, who tested positive for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the virus that causes Covid-19 on qualitative polymerase-chain-reaction assay. The Ochsner Health population is 33% black non-Hispanic and 65% white non-Hispanic. The primary outcomes were hospitalization and in-hospital death.

RESULTS

A total of 3626 patients tested positive, of whom 145 were excluded (84 had missing data on race or ethnic group, 9 were Hispanic, and 52 were Asian or of another race or ethnic group). Of the 3481 Covid-19-positive patients included in our analyses, 60.0% were female, 70.4% were black non-Hispanic, and 29.6% were white non-Hispanic. Black patients had higher prevalences of obesity, diabetes, hypertension, and chronic kidney disease than white patients. A total of 39.7% of Covid-19-positive patients (1382 patients) were hospitalized, 76.9% of whom were black. In multivariable analyses, black race, increasing age, a higher score on the Charlson Comorbidity Index (indicating a greater burden of illness), public insurance (Medicare or Medicaid), residence in a low-income area, and obesity were associated with increased odds of hospital admission. Among the 326 patients who died from Covid-19, 70.6% were black. In adjusted time-to-event analyses, variables that were associated with higher in-hospital mortality were increasing age and presentation with an elevated respiratory rate; elevated levels of venous lactate, creatinine, or procalcitonin; or low platelet or lymphocyte counts. However, black race was not independently associated with higher mortality (hazard ratio for death vs. white race, 0.89; 95% confidence interval, 0.68 to 1.17).

CONCLUSIONS

In a large cohort in Louisiana, 76.9% of the patients who were hospitalized with Covid-19 and 70.6% of those who died were black, whereas blacks comprise only 33% of the Ochsner Health population. Black race was not associated with higher in-hospital mortality than white race, after adjustment for differences in sociodemographic and clinical characteristics on admission.

Table 1. (Continued)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>White Non-Hispanic (N=1030)</th>
<th>Black Non-Hispanic (N=2451)</th>
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</thead>
<tbody>
<tr>
<td>Location of testing — no. (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary care</td>
<td>222 (21.6)</td>
<td>337 (13.7)</td>
</tr>
<tr>
<td>Urgent care</td>
<td>196 (19.0)</td>
<td>215 (8.8)</td>
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<tr>
<td>Emergency department</td>
<td>391 (38.0)</td>
<td>1601 (65.3)</td>
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<tr>
<td>Inpatient</td>
<td>27 (2.6)</td>
<td>77 (3.1)</td>
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<tr>
<td>Other or unknown service area</td>
<td>194 (18.8)</td>
<td>221 (9.0)</td>
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</table>


<table>
<thead>
<tr>
<th>Characteristic</th>
<th>White Non-Hispanic (N=319)</th>
<th>Black Non-Hispanic (N=1063)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age — yr</td>
<td>69.2±16.6</td>
<td>60.5±14.8</td>
</tr>
<tr>
<td>Female sex — no. (%)</td>
<td>127 (39.8)</td>
<td>578 (54.4)</td>
</tr>
<tr>
<td>Charlson Comorbidity Index score</td>
<td>1.0±1.8</td>
<td>1.3±2.2</td>
</tr>
<tr>
<td>Insurance — no. (%)</td>
<td></td>
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<tr>
<td>Commercial</td>
<td>89 (27.9)</td>
<td>417 (39.2)</td>
</tr>
<tr>
<td>Medicare</td>
<td>178 (55.8)</td>
<td>458 (43.1)</td>
</tr>
<tr>
<td>Medicaid</td>
<td>18 (5.6)</td>
<td>124 (11.7)</td>
</tr>
<tr>
<td>Self-pay or other</td>
<td>34 (10.7)</td>
<td>64 (6.0)</td>
</tr>
<tr>
<td>Residence in low-income area — no. (%)</td>
<td>108 (33.9)</td>
<td>643 (60.5)</td>
</tr>
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</table>
## Figure 3. Factors Associated With Handwashing and Leaving the House

<table>
<thead>
<tr>
<th>Factor</th>
<th>Estimate (95% CI)</th>
<th>Favors not washing hands</th>
<th>Favors washing hands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race/ethnicity</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>15.0507 [Reference]</td>
<td>8.8163 to 17.2833</td>
<td>6.2340 to 8.8163</td>
</tr>
<tr>
<td>Black</td>
<td>16.0969 (14.8163 to 17.3775)</td>
<td>8.8569 to 17.3249</td>
<td>6.2340 to 8.8163</td>
</tr>
<tr>
<td>Hispanic</td>
<td>16.8147 (15.3337 to 18.2957)</td>
<td>8.8569 to 17.3249</td>
<td>6.2340 to 8.8163</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>15.0507 [Reference]</td>
<td>9.3681 to 11.8921</td>
<td>6.6826 to 8.3675</td>
</tr>
<tr>
<td>Male</td>
<td>11.2508 (10.4476 to 12.0541)</td>
<td>8.8569 to 17.3249</td>
<td>6.2340 to 8.8163</td>
</tr>
<tr>
<td>Age, y</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-29</td>
<td>10.6261 (9.3681 to 11.8921)</td>
<td>8.8569 to 17.3249</td>
<td>6.2340 to 8.8163</td>
</tr>
<tr>
<td>30-54</td>
<td>15.0176 (13.9014 to 16.1337)</td>
<td>8.8569 to 17.3249</td>
<td>6.2340 to 8.8163</td>
</tr>
<tr>
<td>55-64</td>
<td>15.0507 [Reference]</td>
<td>13.9014 to 16.1337</td>
<td>6.2340 to 8.8163</td>
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<tr>
<td>≥65</td>
<td>14.0587 (12.9573 to 15.1601)</td>
<td>8.8569 to 17.3249</td>
<td>6.2340 to 8.8163</td>
</tr>
<tr>
<td>Income, $</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>&lt;25,000</td>
<td>15.0507 [Reference]</td>
<td>13.4802 to 15.9634</td>
<td>6.2340 to 8.8163</td>
</tr>
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<td>25,000 to 49,999</td>
<td>14.7218 (13.4802 to 15.9634)</td>
<td>8.8569 to 17.3249</td>
<td>6.2340 to 8.8163</td>
</tr>
<tr>
<td>50,000 to 74,999</td>
<td>14.8622 (13.5215 to 16.2029)</td>
<td>8.8569 to 17.3249</td>
<td>6.2340 to 8.8163</td>
</tr>
<tr>
<td>75,000 to 99,999</td>
<td>14.8176 (13.9032 to 15.7472)</td>
<td>8.8569 to 17.3249</td>
<td>6.2340 to 8.8163</td>
</tr>
<tr>
<td>≥100,000</td>
<td>14.5245 (13.2705 to 15.7785)</td>
<td>8.8569 to 17.3249</td>
<td>6.2340 to 8.8163</td>
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<tr>
<td>Political affiliation</td>
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</tr>
<tr>
<td>Independent or nonaffiliated</td>
<td>15.0507 [Reference]</td>
<td>13.1763 to 15.0765</td>
<td>6.2340 to 8.8163</td>
</tr>
<tr>
<td>Democrat</td>
<td>14.1264 (13.1763 to 15.0765)</td>
<td>8.8569 to 17.3249</td>
<td>6.2340 to 8.8163</td>
</tr>
<tr>
<td>Republican</td>
<td>14.3348 (13.3969 to 15.2727)</td>
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<tr>
<td>Hotspot</td>
<td>15.1723 (13.2648 to 17.0798)</td>
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<td>6.2340 to 8.8163</td>
</tr>
<tr>
<td>Times left home in last 3 d</td>
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<td></td>
</tr>
<tr>
<td>Factor</td>
<td>Estimate (95% CI)</td>
<td>Favors not leaving home</td>
<td>Favors leaving home</td>
</tr>
<tr>
<td>Race/ethnicity</td>
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</tr>
<tr>
<td>White</td>
<td>2.0403 [Reference]</td>
<td>1.7795 to 2.3863</td>
<td>1.4584 to 2.1427</td>
</tr>
<tr>
<td>Black</td>
<td>2.9709 (2.551 to 3.3909)</td>
<td>1.4584 to 2.1427</td>
<td>1.6283 to 2.3767</td>
</tr>
<tr>
<td>Hispanic</td>
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<td>1.6283 to 2.3767</td>
<td>1.3661 to 1.9794</td>
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<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>2.0403 [Reference]</td>
<td>1.4584 to 2.1427</td>
<td>1.6283 to 2.3767</td>
</tr>
<tr>
<td>Male</td>
<td>2.7754 (2.5406 to 3.0101)</td>
<td>1.6283 to 2.3767</td>
<td>1.3661 to 1.9794</td>
</tr>
<tr>
<td>Age, y</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>18-29</td>
<td>2.1829 (1.7795 to 2.5863)</td>
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</tr>
<tr>
<td>30-54</td>
<td>2.1359 (1.8391 to 2.4327)</td>
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</tr>
<tr>
<td>55-64</td>
<td>2.0403 [Reference]</td>
<td>1.6283 to 2.3767</td>
<td>1.3661 to 1.9794</td>
</tr>
<tr>
<td>≥65</td>
<td>1.6828 (1.3661 to 1.9794)</td>
<td>1.6283 to 2.3767</td>
<td>1.3661 to 1.9794</td>
</tr>
<tr>
<td>Income, $</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>&lt;25,000</td>
<td>2.0403 [Reference]</td>
<td>1.7795 to 2.3863</td>
<td>1.4584 to 2.1427</td>
</tr>
<tr>
<td>25,000 to 49,999</td>
<td>2.0662 (1.7162 to 2.4162)</td>
<td>1.4584 to 2.1427</td>
<td>1.6283 to 2.3767</td>
</tr>
<tr>
<td>50,000 to 74,999</td>
<td>1.8884 (1.5526 to 2.2242)</td>
<td>1.6283 to 2.3767</td>
<td>1.3661 to 1.9794</td>
</tr>
<tr>
<td>75,000 to 99,999</td>
<td>1.9233 (1.5447 to 2.3019)</td>
<td>1.6283 to 2.3767</td>
<td>1.3661 to 1.9794</td>
</tr>
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<td>≥100,000</td>
<td>2.2973 (1.9338 to 2.6609)</td>
<td>1.6283 to 2.3767</td>
<td>1.3661 to 1.9794</td>
</tr>
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<td>Political affiliation</td>
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<td></td>
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</tr>
<tr>
<td>Independent or nonaffiliated</td>
<td>2.0403 [Reference]</td>
<td>1.5447 to 2.0727</td>
<td>1.1843 to 1.3777</td>
</tr>
<tr>
<td>Democrat</td>
<td>1.8084 (1.5447 to 2.0727)</td>
<td>1.1843 to 1.3777</td>
<td>1.0056 to 1.2377</td>
</tr>
<tr>
<td>Republican</td>
<td>2.0956 (1.8143 to 2.3777)</td>
<td>1.1843 to 1.3777</td>
<td>1.0056 to 1.2377</td>
</tr>
<tr>
<td>Hotspot</td>
<td>2.3541 (1.8525 to 2.8557)</td>
<td>1.1843 to 1.3777</td>
<td>1.0056 to 1.2377</td>
</tr>
</tbody>
</table>
SARS-CoV-2 Positivity Rate for Latinos in the Baltimore-Washington, DC Region

The black community has been disproportionately affected by the coronavirus disease 2019 (COVID-19) pandemic in the US. Emerging data highlight sharp increases in cases within the Latino community. We analyzed temporal trends in positivity rates for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in the Baltimore-Washington, DC region by race/ethnicity.

Methods | Samples were collected between March 11, 2020, and May 25, 2020, from 5 hospitals, including emergency departments, and 30 outpatient clinics that are part of the Johns Hopkins Health System (JHHS). SARS-CoV-2 testing inclusion criteria were broadened over time (i.e., initially high-risk individuals only and then all symptomatic patients) as local capacity increased and was standardized across JHHS sites. Samples collected via nasopharyngeal swabs were analyzed using SARS-CoV-2 reverse transcriptase-polymerase chain reaction. Data on patient demographics, comorbidities, SARS-CoV-2 status, and hospitalization were extracted from the integrated electronic health record system.

Patients self-identified as race/ethnicity from fixed categories. Racial/ethnic groups were considered mutually exclusive; i.e., Latinos were excluded from other groups (white, black, other) regardless of reported race. Those who self-reported American Indian, Alaska Native, Asian American, Native Hawaiian, Pacific Islander, or multiracial were grouped as “other.”

Temporal trends in daily positivity rates (7-day moving average; number positive/number tested over the date and preceding 6 days) and testing volumes stratified by race/ethnicity were evaluated. Total rates of SARS-CoV-2 positive, hospitalization, and categorical patient characteristics were compared between Latinos and each racial/ethnic group using the χ² test. Analysis of variance (ANOVA) was used to compare trends in positivity rates between groups. An omnibus ANOVA comparison with significance set at P < .05 was performed, followed by pairwise comparisons using the Latin group as reference, with correction for multiple comparisons (Tukey test). All analyses were performed with R version 3.6.2; a 2-sided P < .05 determined statistical significance. This work was deemed exempt by the Johns Hopkins Institutional Review Board, meeting criteria for quality improvement.

Results | A total of 6662 (16.3% [95% CI, 16.0%-16.7%]) of 37,727 patients tested positive for SARS-CoV-2. The positivity rate for Latino patients was 42.6% (95% CI, 41.3%-43.9%), significantly higher than the rate for white patients (8.8% [95% CI, 8.4%-9.2%]), black patients (7.6% [95% CI, 16.6%-18.3%]), or those of other race/ethnicity (17.2% [95% CI, 16.2%-18.3%]) (P < .001 for each pairwise comparison) (Table). The daily positivity rate was higher for Latino patients than those in the other racial/ethnic groups (P < .001 for each pairwise comparison, Figure A). Moving average trends in positivity rates peaked later for Latino patients at 53.4% (95% CI, 49.6%-57.3%) on May 10, 2020, compared with white patients (63.1% [95% CI, 14.1%-18.3%]) on April 16, 2020, and black patients (29.6% [95% CI, 26.5%-32.6%]) on April 19, 2020. As testing volume increased over time for all racial/ethnic groups (Figure B, C, D, and E), positivity rates declined (Figure A).

Discussion | More than 40% of Latinos in the Baltimore-Washington, DC metropolitan region who were tested for SARS-CoV-2 were positive, a much higher proportion than for any other racial/ethnic group. While SARS-CoV-2 testing inclusion criteria were standardized, differential access to testing may have contributed to higher rates of positivity. Latino patients have historically demonstrated lower rates of insurance and health care utilization. However, an alternative explanation may be higher disease prevalence, with the spread of infection among Latinos driven by decreased opportunities for social distancing in the setting of dense housing and continued work engagement due to essential worker status and economic necessity. This study was limited to patients visiting JHHS, excluding those tested for SARS-CoV-2 elsewhere in the region. In addition, this study cannot determine whether differences in Latino patient SARS-CoV-2 positivity represent a higher disease prevalence, differences in access to health care (e.g., reluctance in seeking care), or both.

Addressing the unique needs of the Latino community may help mitigate the spread of SARS-CoV-2 infection and prevent COVID-19 disease.

Diego A. Martinez, PhD
Jeevanshi S. Hinson, MD, PhD
Ellie Y. Klein, PhD
Nathan A. Irvin, MD
Mostapha Saheedi, MD
Kathleen R. Page, MD
Scott R. Levin, PhD

Table 1. Demographics of Patients Tested for SARS-CoV-2 at the Johns Hopkins Health System

<table>
<thead>
<tr>
<th>Patients of other race/ethnicity</th>
<th>Patients of other race/ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td></td>
</tr>
<tr>
<td>Tested, N.</td>
<td>4169</td>
</tr>
<tr>
<td>Positive, N.</td>
<td>1711</td>
</tr>
<tr>
<td>% of tested (95% CI)</td>
<td>42.6 (41.1-44.1)</td>
</tr>
<tr>
<td>P value</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Black patients</td>
<td>11,639</td>
</tr>
<tr>
<td>% of positive (95% CI)</td>
<td>46.2 (41.9-48.4)</td>
</tr>
<tr>
<td>P value</td>
<td>.02</td>
</tr>
<tr>
<td>Latino patients</td>
<td>2112</td>
</tr>
<tr>
<td>% of positive (95% CI)</td>
<td>55.5 (51.5-59.8)</td>
</tr>
<tr>
<td>P value</td>
<td>.03</td>
</tr>
<tr>
<td>White patients</td>
<td>55.5 (51.5-59.8)</td>
</tr>
<tr>
<td>% of positive (95% CI)</td>
<td>55.5 (51.5-59.8)</td>
</tr>
<tr>
<td>P value</td>
<td>.03</td>
</tr>
<tr>
<td>&lt;18</td>
<td></td>
</tr>
<tr>
<td>% of positive (95% CI)</td>
<td>7.6 (5.4-10.8)</td>
</tr>
<tr>
<td>P value</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>&gt;18</td>
<td></td>
</tr>
<tr>
<td>% of positive (95% CI)</td>
<td>41.3 (39.4-43.2)</td>
</tr>
<tr>
<td>P value</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>admitted to the hospital</td>
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</tr>
<tr>
<td>Patients, N.</td>
<td>516</td>
</tr>
<tr>
<td>% of positive (95% CI)</td>
<td>29.1 (27.0-31.2)</td>
</tr>
<tr>
<td>P value</td>
<td>.003</td>
</tr>
<tr>
<td>Latino patients</td>
<td>2112</td>
</tr>
<tr>
<td>% of positive (95% CI)</td>
<td>55.5 (51.5-59.8)</td>
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<td>P value</td>
<td>.03</td>
</tr>
<tr>
<td>White patients</td>
<td>55.5 (51.5-59.8)</td>
</tr>
<tr>
<td>% of positive (95% CI)</td>
<td>55.5 (51.5-59.8)</td>
</tr>
<tr>
<td>P value</td>
<td>.03</td>
</tr>
<tr>
<td>&lt;18</td>
<td></td>
</tr>
<tr>
<td>% of positive (95% CI)</td>
<td>7.6 (5.4-10.8)</td>
</tr>
<tr>
<td>P value</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>&gt;18</td>
<td></td>
</tr>
<tr>
<td>% of positive (95% CI)</td>
<td>41.3 (39.4-43.2)</td>
</tr>
<tr>
<td>P value</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

Figure 1. SARS-CoV-2 Positivity Rate by Racial/Ethnic Groups in the Baltimore-Washington, DC Region, March 11 to May 25, 2020
Associations Between Built Environment, Neighborhood Socioeconomic Status, and SARS-CoV-2 Infection Among Pregnant Women in New York City

The built environment is associated with infectious disease dynamics, particularly in diseases transmitted by contact, aerosols, or droplets. A recent study of the ongoing severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic in New York revealed significant differences in hospitalization and deaths rates among the city's boroughs, with the highest rates in Queens and the Bronx. To our knowledge, no studies have investigated associations between the built environment, markers of neighborhood socioeconomic status, and SARS-CoV-2 transmission. We leveraged a universal testing program for SARS-CoV-2 in pregnant women to examine associations between these factors and SARS-CoV-2 prevalence.

Methods: We conducted a cross-sectional study of New York City residents delivering at New York-Presbyterian/Columbia University Irving Medical Center or Allen Hospital after implementation of universal SARS-CoV-2 nasal and throat quantitative reverse transcriptase-polymerase chain reaction testing at the time of admission to the labor and delivery unit from March 22 through April 28, 2020. We linked patients to demographic and socioeconomic data from the US Census Bureau’s American Community Survey national survey with detailed demographic, socioeconomic, and housing data, and to real estate tax data from New York’s Department of City Planning. We abstracted building-level variables, including number of residential units per building and mean assessed value (per square foot), and neighborhood-level variables, including median household income, poverty rate, unemployment rate, population density, household membership/persons per household, and household crowding (percentage of households with >1 person per room). Neighborhood was defined using New York City neighborhood tabulation areas, which divide the city into 195 districts, with at least 15,000 residents each.

Results: We identified 434 New York City residents who were tested for SARS-CoV-2. Of the 396 patients (91%) linked to buildings and neighborhoods in the city, 71 (17.9%) were infected with SARS-CoV-2. Cohort characteristics are tabulated in the Table. The likelihood of SARS-CoV-2 varied substantially across measures of built environment and neighborhood socioeconomic status (Figure). The lowest probability of infection was estimated for women living in buildings with very high assessed values (8.2% [95% CI, 1.2%-15.2%]), and the highest was for those residing in neighborhoods with high household membership (23.9% [95% CI, 18.4%-29.4%]). Odds of infection were lower among women living in buildings with more residential units (interquartile range, 0.34 [95% CI, 0.16-0.72]) and higher assessed values (interquartile range, 0.59 [95% CI, 0.30-0.89]) and in neighborhoods with higher median incomes (interquartile range, 0.32 [95% CI, 0.12-0.83]). Odds of infection were higher among women residing in neighborhoods with high unemployment rates (interquartile range, 2.13 [95% CI, 1.18-3.81]), larger household membership (interquartile range, 3.16 [95% CI, 1.58-6.7]), and greater household crowding (interquartile range, 2.27 [95% CI, 1.12-4.61]). There was no statistically significant association between SARS-CoV-2 infection and population density (interquartile range, 0.70 [95% CI, 0.32-1.31]) or poverty rate (interquartile range, 2.03 [95% CI, 0.97-4.25]).

Table. Cohort Characteristics

<table>
<thead>
<tr>
<th>SARS-CoV-2 Status</th>
<th>Negative (n = 376)</th>
<th>Positive (n = 77)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal age, median (IQR), y</td>
<td>31.0 (27.0-35.0)</td>
<td>27.0 (24.0-32.0)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Gestational age, median (IQR), wk</td>
<td>38.0 (38.0-39.0)</td>
<td>39.0 (38.0-39.0)</td>
<td>.83</td>
</tr>
<tr>
<td>Gravida (IQR)</td>
<td>2.0 (2.0)</td>
<td>2.0 (2.0)</td>
<td>.94</td>
</tr>
<tr>
<td>Parity (IQR)</td>
<td>0.0 (0.0)</td>
<td>0.0 (0.0)</td>
<td>.93</td>
</tr>
<tr>
<td>Hypertension, No. (%)</td>
<td>26 (8.0)</td>
<td>7 (9.2)</td>
<td>.63</td>
</tr>
<tr>
<td>Diabetes, No. (%)</td>
<td>18 (5.0)</td>
<td>2 (2.6)</td>
<td>.34</td>
</tr>
</tbody>
</table>

Abbreviations: IQR, interquartile range; SARS-CoV-2, severe acute respiratory syndrome coronavirus 2.
* P value based on linear regression with cluster robust standard errors.
** Both pregravidal and pregestational conditions included.
\[ P \text{ value based on logistic regression with cluster robust standard errors.} \]
BLACK MATERNAL HEALTH

Covid-19 Restrictions on Birth & Breastfeeding: Disproportionately Harming Black and Native Women

By Kimberly Seals Aters | March 27, 2020

COVID-19 Is No Reason to Abandon Pregnant People

New rules prohibiting spouses or doulas during labor and delivery in many New York City hospitals are putting vulnerable populations at greater risk

By Monica R. McLemore on March 26, 2020

Observations
Opinion

National Advocates for Pregnant Women
National Advocates for Pregnant Women

What We Can Learn From Hospital Restrictions on Birth Support During the Coronavirus Pandemic

The coronavirus pandemic, and our country’s lack of preparedness for it, give us an opportunity to make important observations and learn (or relearn) key lessons. Foundational issues including severe income inequality, lack of a national health care system, and corporatization of public goods and services are being exposed during this pandemic. Also exposed are the Trump Administration’s totally inadequate, often misleading and counterproductive responses to the coronavirus that have put all of us at risk.

For example, as Dr. Anne-Marie Slaughter explained in a New York Times op-ed, South Korea mobilized health care companies to make coronavirus tests in late January, when the country had only four cases. Soon, 10,000 Koreans a day were being tested, and new new infections are dropping. The first cases in the United States were identified in January, too, and yet we still don’t have enough tests.
COVID19, Women, Pregnancy and OUD: Opportunities for Positive Practice Change But also Increasing Latitude of Harm
Home- versus office-based
Observed versus unobserved BUP inductions

- Home-based unobserved BUP induction and office-based observed induction are equally effective (Home induction not inferior)

- In-person is not essential to initiate BUP for OUD

- COVID-19 Response: can initiate via telephone (in addition to HIPAA-approved telehealth platforms)

- Hence pandemic response is not inferior care
Home- versus office-based buprenorphine inductions for opioid-dependent patients


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Received 12 May 2009; accepted 4 August 2009

Abstract

Recent legislation permits the treatment of opioid-dependent patients with home-based induction strategies. We examined whether patients who had home-based inductions achieved better outcomes than patients who had office-based inductions. A study of 115 opioid-dependent patients treated (79.1%) in office-based versus 40 (79.4%) in home-based settings showed that patients who received home-based inductions had significantly lower rates of relapse and higher rates of abstinence compared to patients who received office-based inductions. These findings suggest that home-based induction strategies may be beneficial for the treatment of opioid dependence.

Keywords: Buprenorphine treatment; Buprenorphine induction; Opioid dependence

A comparison of buprenorphine induction strategies: Patient-centered home-based inductions versus standard-of-care office-based inductions


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Received 6 August 2010; accepted 9 December 2010

Abstract

Although novel buprenorphine induction strategies are emerging, they have been inadequately studied. To examine our newly developed patient-centered home-based inductions, we conducted a subgroup analysis of 70 opioid-dependent individuals who had buprenorphine inductions at an urban community health center. Participants chose their induction strategy. Standard-of-care office-based inductions were physician-driven, with multiple assessments, and observed, and the patient-centered home-based inductions emphasized patient self-management and included a "kit" for induction at home. We conducted interviews and extracted medical records. Using mixed nonlinear models, we examined associations between induction strategy and opioid use and any drug use. Compared with those with standard-of-care office-based inductions, participants with patient-centered home-based inductions had no significant differences in opioid use (adjusted odds ratio [AOR] = 0.65, 95% confidence interval [CI] = 0.31–1.37) but greater reductions in any drug use (AOR = 0.63, 95% CI = 0.41–0.97). Taking into account the limitations of our observational cohort study design, we conclude that participants with patient-centered home-based inductions had similar reductions in opioid use and greater reductions in drug use than those with standard-of-care office-based inductions. It is essential that new induction strategies be based on existing models or theories and be well studied.

Keywords: Buprenorphine; Buprenorphine induction; Opioid; Opioid addiction treatment; Drug use; Primary care
Remote Assessment for New Patients

• Establish Diagnosis (DSM-5)
• Review PMP
• History of recent drug use, withdrawal symptoms, etc
• Naloxone co-prescribing
• Consider symptomatic medications for withdrawal

• Drug testing (urine, saliva, etc) not essential
• Pregnancy test – not needed for medication initiation for OUD
Urine Drug Testing: Opportunity for Positive Practice Change

• Increase in tele-services decrease urine drug testing
• Urine drug testing not recommended for assessment of substance use disorder in pregnancy
• Urine testing at time of delivery – problematic

• Addiction Medicine response to COVID-19: Opportunity to rethink role of urine drug testing in prenatal and addiction care
The 4th Trimester - Postpartum

• Critical Period
  – Newborn care, breastfeeding, maternal/infant bonding
  – Mood changes, sleep disturbances, physiologic changes
  – Cultural norms, “the ideal mother” in conflict with what it is actually like to have a newborn
  – Insurance and welfare realignment

• Neglected Period
  – Care shifts from frequent to infrequent
  – From Mom-focused (PNC provider) to Baby-focused (Pediatrician)
  – From “medical” to “social” (WIC)
  – Continuity of Care: Addiction Provider
Medication assisted treatment discontinuation in pregnant and postpartum women with opioid use disorder

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2. Department of Veterans Affairs Medical Center, 2000 Vine Street, Cincinnati, OH 45220, USA

Table 1

<table>
<thead>
<tr>
<th>Study</th>
<th>Sample size</th>
<th>Sample age</th>
<th>Sample race/ethnicity</th>
<th>Methadone dose at delivery (mg)</th>
<th>Methadone dose at delivery (mg)</th>
<th>Discontinuation rates and other treatment outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study 1</td>
<td>100</td>
<td>25-35</td>
<td>Caucasian, African American</td>
<td>100 mg</td>
<td>75 mg</td>
<td>Overall, 30% discontinuation prior to delivery</td>
</tr>
<tr>
<td>Study 2</td>
<td>50</td>
<td>20-40</td>
<td>Hispanic, Native American</td>
<td>50 mg</td>
<td>25 mg</td>
<td>Methadone dose at delivery 50 mg</td>
</tr>
</tbody>
</table>

Fig. 1. Kaplan-Meier estimates for remaining in methadone treatment after pregnancy.
Fatal and Nonfatal Overdose Among Pregnant and Postpartum Women in Massachusetts

OVID: Obstetrics & Gynecology

Davida M. Schiff, MD, MS, Timothy Nielsen, MPH, Mishka Terplan, MD, MPH, Malena Hood, MPH, Dana Benson, MPH, Hafsatou Diop, MD, MPH, Monica Bharel, MD, MPH, Timothy E. Wilens, MD, Marc LaRochelle, MD, MPH, Alexander Y. Walley, MD, MS, and Thomas Land, MD

Table 2. Opioid Overdose Rates Among Pregnant and Parenting Women With Evidence of Opioid Use Disorder in the Year Before Delivery (n=4,154)

<table>
<thead>
<tr>
<th>Period Relative to Delivery</th>
<th>All OD Events</th>
<th>OD Events While Receiving Pharmacotherapy</th>
<th>OD Events Not Receiving Pharmacotherapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>7.99 (7.01–9.06)</td>
<td>4.43 (3.28–5.36)*</td>
<td>10.04 (8.67–11.58)*</td>
</tr>
<tr>
<td>Year before delivery</td>
<td>9.72 (6.91–13.29)</td>
<td>3.74 (1.02–9.57)</td>
<td>11.89 (8.28–16.54)</td>
</tr>
<tr>
<td>Trimester (weeks of gestation)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st (0–12)</td>
<td>8.88 (6.04–12.61)</td>
<td>4.79 (3.56–11.18)</td>
<td>10.63 (6.94–15.58)</td>
</tr>
<tr>
<td>2nd (13–20)</td>
<td>3.23 (1.81–5.32)</td>
<td>1.20 (0.15–4.35)</td>
<td>4.35 (3.22–7.44)</td>
</tr>
<tr>
<td>3rd (29 or greater)</td>
<td>3.32 (1.59–6.10)</td>
<td>4.08 (1.32–9.51)</td>
<td>2.80 (0.91–6.53)</td>
</tr>
<tr>
<td>Postpartum (mo)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0–3</td>
<td>7.41 (4.92–10.71)</td>
<td>3.17 (1.03–7.41)</td>
<td>10.44 (6.62–15.67)</td>
</tr>
<tr>
<td>4–6</td>
<td>6.89 (4.50–10.10)</td>
<td>1.31 (0.16–4.74)</td>
<td>10.67 (6.84–15.88)*</td>
</tr>
<tr>
<td>7–9</td>
<td>12.2 (8.93–16.23)*</td>
<td>6.74 (3.23–12.40)</td>
<td>15.75 (11.03–21.80)</td>
</tr>
<tr>
<td>10–12</td>
<td>12.35 (9.07–16.42)*</td>
<td>10.64 (6.20–17.60)</td>
<td>13.3 (9.04–18.88)</td>
</tr>
</tbody>
</table>

OD, opioid overdose.
Data are rate/100,000 person-days (95% CI).
* Denotes statistically significant difference between overdose rates among women receiving pharmacotherapy vs women not receiving pharmacotherapy.
† Denotes statistically significant difference between overall overdose rates during third trimester and 7–12 months postpartum.
Postpartum Issues

• Breast Feeding:
  Attachment and NAS management (ESC)
  vs
  COVID-19 hospital policies

• Contraception:
  Sterilization at time of delivery
  Postpartum LARC

• Medication and addiction treatment continuation
  Telehealth for Postpartum Visits
Concerning Trends: Child Welfare

- Opioid Crisis and Foster Care Epidemic
- Racial Inequities Along Child Welfare Continuum
- COVID-19 Response:
  - Delay in Family Court Hearings
  - Denial of Visitation for Parents
  - Insistence on Tele-visits for Newborns (!)
  - In context of continued increase in reporting and removals
Concerning Trends: Child Welfare

- Children’s Bureau Response:

Refrain from making sweeping, blanket orders ceasing, suspending, or postponing court hearings;
- Ensure that important decisions about when and how hearings are conducted are made on a case-by-case basis in accordance with the facts of each individual matter;
- Encourage attorneys to file written motions raising issues of immediate concern;
- Make maximum use of technology to ensure due process where in-person hearings are not possible or appropriate;
- Ensure parents and youth have access to technology such as cell phones, tablets, or computers with internet access to participate in hearings or reviews and maintain important familial connections;
- Consider utilizing CIP funds to support and enhance virtual participation for parents, children, youth, and their attorneys in hearings and reviews; and
- Encourage attorneys to resolve agreed-upon issues via stipulated orders. For example, if all parties agreed that a child in foster care can be reunified with his/her family immediately, that issue should be resolved via a stipulated order, rather than waiting weeks or months for an in-person court hearing.
Concerning Trends: Overdose
What can community partners do?

- Help get people into treatment and recovery
  - Substance use, misuse and addiction assessment
- Support medication for OUD
  - Remote Initiation of Medication for OUD
  - Disseminate provider support information (UCSF Warmline)
- Support Breastfeeding
  - Disseminate PPE to make breastfeeding safer
What can community partners do?

- **Naloxone**  
  - Co-prescribe / distribute

- **Support Postpartum Care**  
  - Consider telehealth

- **Support Wellness**  
  - Recognize behavioral health consequences of COVID19 response
What can community partners do?

• Resist Policies of Isolation and Separation

• Don’t Educate – Center on women who use drugs
  – Person-Centered Care
  – Humility and Open-ended Questions

• Recognize Opportunities and Guard Against Unintended Consequences
Thank You

Mishka Terplan  @do_less_harm Mishka.Terplan@ucsf.edu

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