Week 15 Newsletter Prepared by:

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considerations-return-to-in-person-education-in-schools/
- “the AAP strongly advocates that all policy considerations for the coming school year should start with a goal of having
students physically present in school”.

In the News: PAHO and WHO Recommendations Regarding the use of ivermectin as a treatment for COVID-19.
- “laboratory results showing efficacy of ivermectin to reduce viral loads in laboratory cultures, at dosage levels far
beyond those approved by the FDA for treatment of parasitic diseases in humans, are not sufficient to indicate that
ivermectin will be of clinical benefit to reduce viral loads in COVID-19 patients”

In the News: No clinical benefit from the use of lopinavir-ritonavir in hospitalized COVID-19 patients studied in RECVORY

In the News: WHO discontinues hydroxychloroquine and lopinavir/ritonavir treatment arms for COVID-19. Released July
ritonavir-treatment-arms-for-covid-19

Articles:
1. Dodd RH et al. Willingness to vaccinate against COVID-19 in Australia. The Lancet Infectious Diseases. June 30th,

Background:
- During the SARS-CoV-2 pandemic, a vaccine offers the possibility of herd immunity and protection for the most
vulnerable against serious consequences of COVID-19.
  o Vaccination uptake would need to reach 67% for herd immunity to be accomplished with an R0 3.0.
The COCONEL Group reported that 26% of French adults would not accept a COVID-19 vaccine. The same question was explored among a diverse sample of Australian adults.

**Methods:**
- An online survey of 4,362 Australians ages 18 years and older was conducted between April 17-21 approximately 4 weeks after lockdown measures became active in Australia.
- Participants were asked about actions or intentions towards flu vaccine and potential COVID-19 vaccine.

**Results:**

<table>
<thead>
<tr>
<th>Study Factor</th>
<th>Descriptives n (%)</th>
<th>Agree to flu vaccine (%)</th>
<th>Flu vaccine OR (95% CI)*</th>
<th>Agree to COVID-19 vaccine (%)</th>
<th>COVID-19 vaccine OR (95% CI)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health literacy</td>
<td>Adequate 3813 (87.4) 78.5% 1.00 (ref) p &lt; 0.001 86.9% 0.58 (0.46-0.73) p &lt; 0.001</td>
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<td>Inadequate 549 (12.6) 63.0% 0.62 (0.51-0.75) 78.0% -</td>
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<td>Age</td>
<td>18-25 years 964 (22.1) 68.8% 1.06 (0.87-1.30) 86.0% 1.40 (1.08-1.81) -</td>
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<td>26-40 years 1215 (27.9) 73.1% 1.00 (ref) 84.8% -</td>
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<td>41-55 years 962 (22.0) 77.0% 1.23 (1.01, 1.50) 83.5% 0.90 (0.71-1.13) -</td>
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<td>56-90 years 1221 (28.0) 85.7% 2.34 (1.90, 2.88) 88.4% 1.43 (1.12-1.81) -</td>
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<td>Education</td>
<td>University 2811 (64.4) 79.7% 1.00 (ref) 87.3% -</td>
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<td>Certificate I-IV 617 (14.1) 73.6% 0.71 (0.58, 0.87) 83.5% 0.72 (0.57, 0.92) -</td>
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<td>High school or less 934 (21.4) 69.1% 0.62 (0.51, 0.74) 82.5% 0.66 (0.53, 0.82) -</td>
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*Health literacy adequacy was based on a single-item health literacy screener.*

- 630 (14.4%) of participants said they would not get the flu vaccine this year
  - 394 (9%) were indifferent
- 3,338 (76.5%) said they would get the flu vaccine this year
- 213 (4.9%) said they would not get a COVID-19 vaccine if one became available
  - 408 (9.4%) were indifferent
- 3,741 (85.8%) said they would get a COVID-19 vaccine if one became available
- Most common reason stated for not getting a COVID-19 vaccine:
  - 93/213 participants believe that the threat of COVID-19 has been exaggerated
  - Inadequate health literacy and lower education level were significantly associated with a reluctance to be vaccinated against both influenza and COVID-19 (P<0.001).

**Conclusions:**
- Targeted vaccine education to the lower education and health literacy groups is needed
- Limitations: opinions of Australians only, reasons against vaccination likely not representative globally particularly in US (demographic of anti-vaxxers are different)

https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2767980

**Background:**
- State-level differences in diagnostic availability, differing strategies for testing, and delays in testing and reporting have all hampered efforts to track the true severity and impact of COVID-19 in the United States (US).
• The objective of this project is to estimate the burden of all deaths related to COVID-19 in the United States between March and May 2020 by evaluating deaths attributed to COVID-19 and excess deaths during the same time period.

Methods:
• Observational study to evaluate the numbers of US deaths from any cause and deaths from pneumonia/influenza/COVID-19 from March 1, 2020 through May 30, 2020.
• Information on deaths was obtained from the National Center for Health Statistics mortality surveillance system
  o Data on deaths due to pneumonia, influenza, and COIVD-19 (International Statistical Classification of Diseases and Related Health Problems, Tenth Revision codes U07.1 or J09-J18)
  o The NCHS data are based on the state where the death occurred rather than the state of residence.

Results:
• Across the US, there were 95,235 deaths officially attributed to COVID-19 from March 1 – May 30, 2020.
• There were an estimated 122,300 excess deaths from March 1 – May 30, 2020.
  o 78% of these excess deaths were officially attributed to COVID-19
• Changes in mortality that occurred during the pandemic varied by state and region
  o NYC’s all-cause mortality rose 7-fold above baseline (24,800 – 25,400 excess deaths) during their peak
  o In the rest of NY state only a 2-fold rise above baseline (11,900 – 12,700 excess deaths) was observed
• The gap between the reported COVID-19 deaths and the estimated all-cause excess deaths varied among states
  o CA had 4,046 reported deaths due to COVID-19 and 6,800 excess all-cause mortality (41% excess deaths unattributed to COVID-19)
  o TX and AZ had even wider gaps of 55% and 53% of excess deaths unattributed to COVID-19, respectively
• Some discrepancy between reported COVID-19 deaths and excess deaths could be related to the intensity and timing of increases in testing
  o TX and CA, excess all-cause mortality preceded widespread adoption of testing for SARS-CoV-2
  o In other states, testing intensity increased prior to or with the increase in excess deaths, leaving a smaller gap
• The increase in excess deaths in many states trailed an increase in outpatient visits due to influenza-like illness by several weeks

Conclusions/limitations:
• Excess deaths provide an estimate of the full COVID-19 burden, official tallies likely undercount COVID-19 related deaths particularly in places that lacked widespread testing
• Monitoring trends in mortality outcomes, like changes in all-cause mortality, provide a window into the magnitude of the mortality burden missed in official tallies of COVID-19 deaths
• These analyses are all based on provisional data, which are incomplete for recent weeks in some states because of reporting delays