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EDUCATION

Podcast Contributor Show Notes

TITLE: COVID-19 and School Reopening Update

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Intro

In this Hippo Education bonus, Lisa Patel, MD, sits down with Jeanne Noble, MD, Associate Professor of Emergency Medicine and Director of COVID Response at UCSF Parnassus, to discuss the clinical data and updated CDC guidelines regarding school reopening during COVID, from in-school transmission rates, vaccines, and mental health issues. Lisa also interviews Itoco Garcia, Ed.D, Superintendent of Sausalito Marin City School District, on how his schools safely reopened during the pandemic.

Tags

Infectious Disease ID, Pediatrics, Public Health

References

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Ohio Schools COVID-19 Evaluation Final Report, 2021. Accessed 5 Mar. 2021. [Report Link].

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Leeb, Rebecca T., et al. “Mental Health–Related Emergency Department Visits among Children Aged <18 Years during the COVID-19 Pandemic — United States, January 1–October 17, 2020.” *MMWR. Morbidity and Mortality Weekly Report*, vol. 69, no. 45, 13 Nov. 2020, pp. 1675–1680. [Article Link].

Brooks, John T. “Maximizing Fit for Cloth and Medical Procedure Masks to Improve Performance and Reduce SARS-CoV-2 Transmission and Exposure, 2021.” MMWR. Morbidity and Mortality Weekly Report, vol. 70, 2021. https://www.cdc.gov/mmwr/volumes/70/wr/mm7007e1.htm?s_cid=mm7007e1_w. Accessed 25 Feb. 2021.

Investigation of Novel SARS-CoV-2 Variant Variant of Concern 202012/01 Technical Briefing 3. [Article Link].

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Objectives: simple 1-2 lines of objective for our chat. (i.e. discuss clinical presentation for pneumonia; review treatment options for PNA; discuss differential diagnosis for sob/cough.)

Our interviews are intended to sound conversational more than a lecture style. That being said having some structure and direction to the conversation is important. A script is not necessary, but having talking points that can take the listener from the *Intro → main talking points → summary* is helpful.

Intro: Please include a few bullet points on how you want to set the stage (i.e.: background info, a clinical case, a question that you want to pose, discuss a review/ update etc) or some basic info the listener will need to get them up to speed for more nuanced questions below.

Our schools have been closed for almost a year. While the initial closing of schools was part of a larger lockdown, with public health officials advocating swift decision-making to contain the rapid spread of a new and poorly understood disease, the failure of schools to reopen in the US, in contrast to the rest of the world, is more difficult to understand.

Main Talking Points:

- Please include your main talking points here. These should also be your main take-home points that you want the listener to walk away with after hearing your segment. These will be included in the "show notes".

1. Here we are almost a year in with schools closed in some places, open in others. Can you tell us a bit about how we got here with this patchwork of places open versus closed? **This patchwork has evolved in the absence of clear federal guidelines regarding school safety. Currently, there are 4 blue states, with CA being the most conservative among them, that restrict school opening based on case rates and there are 5 red states that have mandated school reopening. The rest of the country is in the middle neither mandating reopening nor holding schools back, but teachers unions in general have been very resistant to returning to in-person learning. Therefore, the likelihood of any child having access to in-person education has much less to do with COVID prevalence or risk of disease and much more to do with the political persuasion of the state governor and the power of the teachers union in that state.**
2. Tell us a bit about how you got involved in school reopening as the Director for COVID19 response for UCSF. **It began with requests for presentations at my own kids schools, and then friends' schools, and then eventually requests for webinars on safe reopening strategies from county superintendents. Initially, I thought that resistance to school reopening was due primarily to lack of information on safety and among private schools, that seemed to be at least somewhat true, But among larger public schools, it became clear that lack of information was not the *primary* barrier to reopening but that**

unions have had a whole litany of demands, many unrelated to COVID. The Berkeley teachers' union, for example, has included a housing subsidy for teachers among its demands before return to in-person instruction. And while the data on school safety was growing ever stronger, the evidence of harm to children from prolonged social isolation was also increasing dramatically. I wrote my first OpEd in November, about the urgency of getting kids back to school, followed by open letter signed by 30 UCSF health leaders calling for return to in-person education by February 1st and have been working to bring data to the center of the school reopening discussion ever since.

3. Last March when all schools shut down, we didn't know much about COVID-19. We thought kids and schools could be superspreaders so we shut down out of an abundance of caution. Now we actually have data that shows us with basic mitigation, schools are not superspreader sites. Can you tell us about the studies coming out of Wisconsin and North Carolina?
   The NC study was really a watershed study due its size, following 90K K-12 students and 10K teachers over 3 months during times of high community prevalence. When community rates of COVID would have predicted up to 900 school transmissions, there were only 32. This was achieved by a very basic public health strategy of the 3Ws -- wear a mask, watch your distance, and wash your hands. No new HVAC systems or capital investments, basically just universal mask wearing and attempts at some degree of physical distancing. There were zero student to teacher transmissions and their 3 case clusters were among pre-K and special needs kids who were not initially masked. MS/HS students did not show higher rates of transmission than elementary students. In Wi, more than 5K K-12 students and teachers in rural schools were followed during times of very high community prevalence, resulting in just 7 school transmissions, only 2 of which were among MS and HS students and again zero student to teacher transmissions.
4. There have been 3 big changes since we did our last segment, and I want to hit upon what each of these has meant for school reopening:
   a. Vaccines -- **unfortunately, the advent of vaccines has worked against school reopening. Despite statements by Dr. Facui and CDC Director Rochelle Walensky that teacher vaccination should not be viewed as a prerequisite to return to in-person teaching, it has become an additional barrier to reopening, with teachers' unions advocating for an additional 6 weeks of closure after the last adult who would be engaged in in-person teaching has received their first shot. In San Francisco, for example the union leaders have taken this stance, which would mean the earliest reopening would be pushed back to mid-May, just 3 weeks before the school year is officially over.**

   b. Variants -- **frankly, the variants have been a huge distraction for 2 reasons. 1) they have not increased in prevalence at the alarming pace first predicted. As of 2/22, California is still reporting only 195 cases of the UK variant and 2 cases of the SA variant. 2) More importantly, the secondary attack rate (meaning the likelihood of getting COVID when you have close contact with an infected individual) is not that different in absolute terms. That is, the attack rate**

increases from 11 with standard COVID to 14.7% with the UK variant, an absolute increase of 3.7% (although the relative increase of 33% is what is typically reported in the media). The importance of the variants is at a larger population level for states and countries simply because a higher attack rate means more cases, all things being equal, and potentially a slower decline in prevalence than we would otherwise see as more of our population gets vaccinated. But this impact of variants is already accounted for in our community prevalence rates AND case rates have been falling faster than predicted. Variants have been a huge distraction and inappropriately cited as an additional reason for keeping schools closed as if an 11% attack rate was manageable but 14.7% is not.

c. CDC created a set of guidelines for the country which were not provided by the prior administration. Can you tell us the good, the bad, and the ugly for these new recommendations?

The good:

1) the CDC recommends that schools reopen for **all** students, K-12, when daily case rates are below 7 per 100K, calling for FULL in-person learning, without mandatory distancing and never recommends closing down in-person education for K-6 students, even when daily CRs are above 14 per 100K but instead moving to hybrid learning with physical distancing.

2) There is no requirement for new ventilation systems, recommending instead that classroom doors be kept open, in addition to opening windows when possible. This reflects the fact that COVID is primarily a droplet disease and although viral particles lingering in the air for hours is a theoretical possibility, it is exceedingly rare and not a significant mode of transmission.

3) the CDC recognizes that teacher vaccination should not be a prerequisite for school reopening

The bad:

1) The CDC did not truly de-link community prevalence from school reopening, despite data from North Carolina, Wisconsin and elsewhere that suggest that community prevalence does *not* predict school transmission (while mask adherence does) and
2) Second, the CDC continued with the conservative approach, no longer supported by the best data, that adolescents represent a higher risk for *in-school* transmission.
3) And third, the CDC recommends 6 foot physical distancing between students when community prevalence is >7 per 100K, which is not data driven and particularly harmful because this 6 foot rule, rather than the more manageable 3 foot rule used by the rest of the world, will force many schools into hybrid configurations, which keep kids in distance learning for at least part of the school week which may actually increase COVID risk since we now know that kids are more likely to acquire COVID during off school hours compared to in-person school hours, when they are supervised and masking is enforced. Further, the benefit of physical distancing is only measurable when there are breaches in masking. This is why health care providers are not considered close contacts of COVID patients even when we are in direct **physical** contact with our symptomatic COVID patients because we are masked. In the school setting, the CDC recommends treating any student as a close contact of a student who tests positive if within 6ft of that student for more than 15 minutes, even if both students were masked. (As a side note,

the state of Ohio just completed a school based study of over 700 students, finding that children who were close contacts and appropriately masked had rates of COVID that were similar to children with no known covid exposures. In other words, masking works)

The ugly:
There is no mandate for reopening schools. Without a national mandate, most children are going to remain out of school for the rest of the year.

5. So we have the data. We have the CDC guidelines. President Biden initially said his goal was to reopen schools within 100 days. He has since clarified that goal to mean K-8, and open means at least 1 day a week in a majority of schools. We're now approaching the one year anniversary in California where schools have remained largely closed to in-person learning while we've seen reopening in other states and in New York City. What are the challenges and barriers that keep schools from reopening, what do you see as the path forward through this contentious issue? The single biggest challenge in California is negotiating with the 300K strong teachers' union. They realize that they hold the cards, that their strong support for CA Governor Gavin Newsom means that there will not be a state mandate to reopen schools in California, despite all of the data of harm to our children.

Please also include one CME question/talk and all of your references.

CME question: a simple multiple choice or T/F question based on your talk

I.e.: Which of the following is a potentially emergent diagnosis for the red eye:
A. Acute angle closure glaucoma
B. Orbital Cellulitis
C. Scleritis
D. Uveitis
E. All of the above

ANSWER:E

References:
Please include your article references here. A hyperlink to the Pubmed abstract is sufficient. If referencing UpToDate or textbook, please use AMA citation formatting.

1. Caironi P, Tognoni G, et al. ALBIOS Study Investigators. Albumin replacement in patients with severe sepsis or septic shock. N Engl J Med 2014; 370:1412-21.