

Dear colleagues,

Let me propose a different type of episode for today, with some “news from the various fields”, provided by Patrick Smits (UK), Ruud Westendorp (DK) and Pierre Van Damme (NL) and an hypothesis on use of saline by Dr. Pharm suzy Huijghebaert.

As you will see, the first two contributions (Ep 216-1 and -2) are about epidemiological facts with some interpretation, the next two are more about arguments on vaccination, especially for children and the last one is on another, potentially complementary approach for prevention and treatment (more hypothetical). In all this, my role has been to bring these data, arguments and hypotheses together. At the end, I just give a very brief synopsis.

As you know, this mailing is not meant as a discussion forum (where everybody can ventilate any opinion). However, today, once again, we are at a crossroads, with hope and uncertainty. At those times, a serene scientific debate is relevant and important. Hence your comments and suggestions are welcome.

(Don't worry, in the next episode, I will discuss the recent literature again as usual)

Ep 216-1 New Data from London and UK (contributed by P Smits)

Source: <https://www.ft.com/content/d07f4559-f4f5-4063-94e7-c322bdcf62ce>

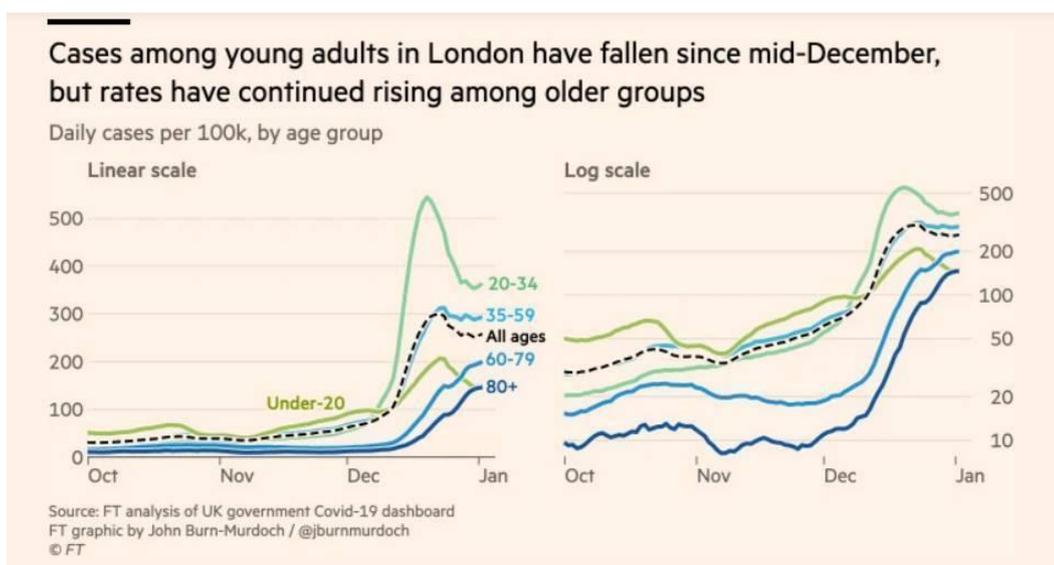
Cases among younger people in London are decreasing but are now increasing among the elderly. (Figure 1)

It is important to monitor what this will mean in the long run for hospitalizations among the elderly and the effect on infections in nursing homes (Figure 3).

Outside the London area, we are now seeing the start of a rising number of infections (Figure 2)

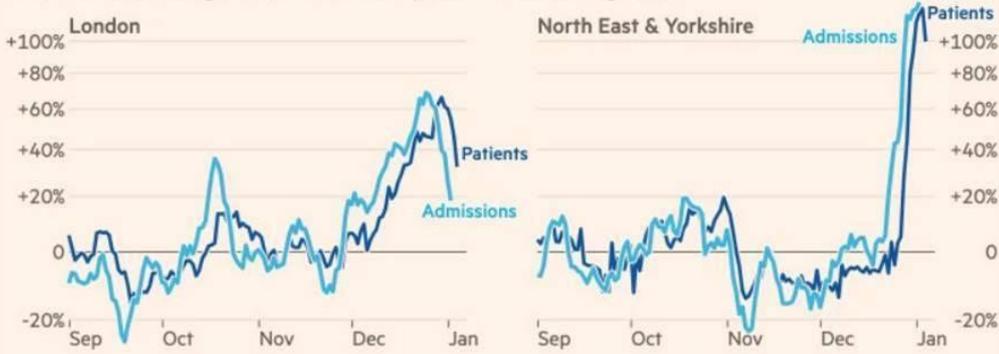
Data on virulence (Figure 4) are favorable.

Nevertheless: Figures published last week showed that 60 per cent of Covid patients in intensive care in England were unvaccinated. But Hopson warned that London was not yet “completely out of the woods” adding: “There is still a risk that because of Christmas, New Year’s Eve and schools going back that we could see London hospitals facing a new surge of hospitalisations.”



The growth rate in London's Covid admissions and patient count has slowed in the last few days, but numbers are rising fast in north-east England

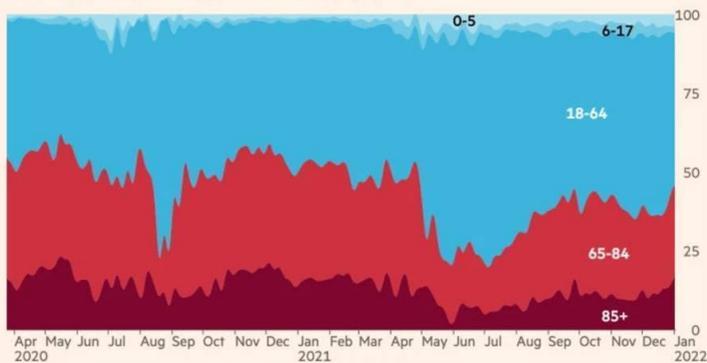
Week-on-week change in admissions and patient numbers (log scale)



Source: FT analysis of UK government Covid-19 dashboard
 FT graphic by John Burn-Murdoch / @burnmurdoch
 © FT

In recent days the elderly share of Covid patients has started ticking up

Percentage of all London hospital admissions by age group



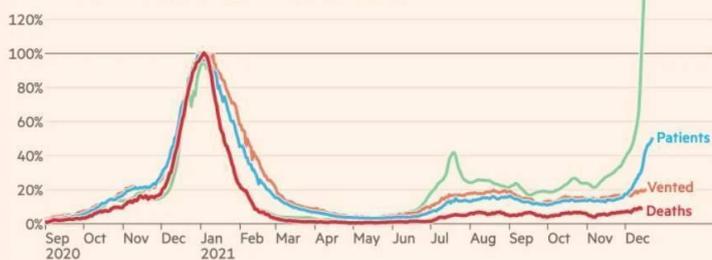
Source: FT analysis of UK government Covid-19 dashboard
 © FT

A senior Whitehall official told the Financial Times that there was particular “concern” about the “extent of translation of increased cases in over-60s into hospitalisations”.

In terms of virulence, there is mounting evidence from the capital that Omicron is milder than previous variants. A Covid patient typically develops severe disease within 15 days of infection. Currently, there are 245 patients with the virus on ventilators in London, which equates roughly to 1 per cent of total cases two weeks earlier. At the same stage of last winter’s wave that figure was 814, or 10 per cent.

Cases and patient numbers have risen steeply in London, but the number of patients on ventilators has barely budged so far

Covid-19 metrics as a percentage of their peak value last winter



Patients and deaths shifted backward to adjust for lag
 Source: UK government Covid-19 dashboard. Based on prior work by Paul Mainwood

Ep 216-2: Denmark also signs of hope (contributed by R Westendorp)

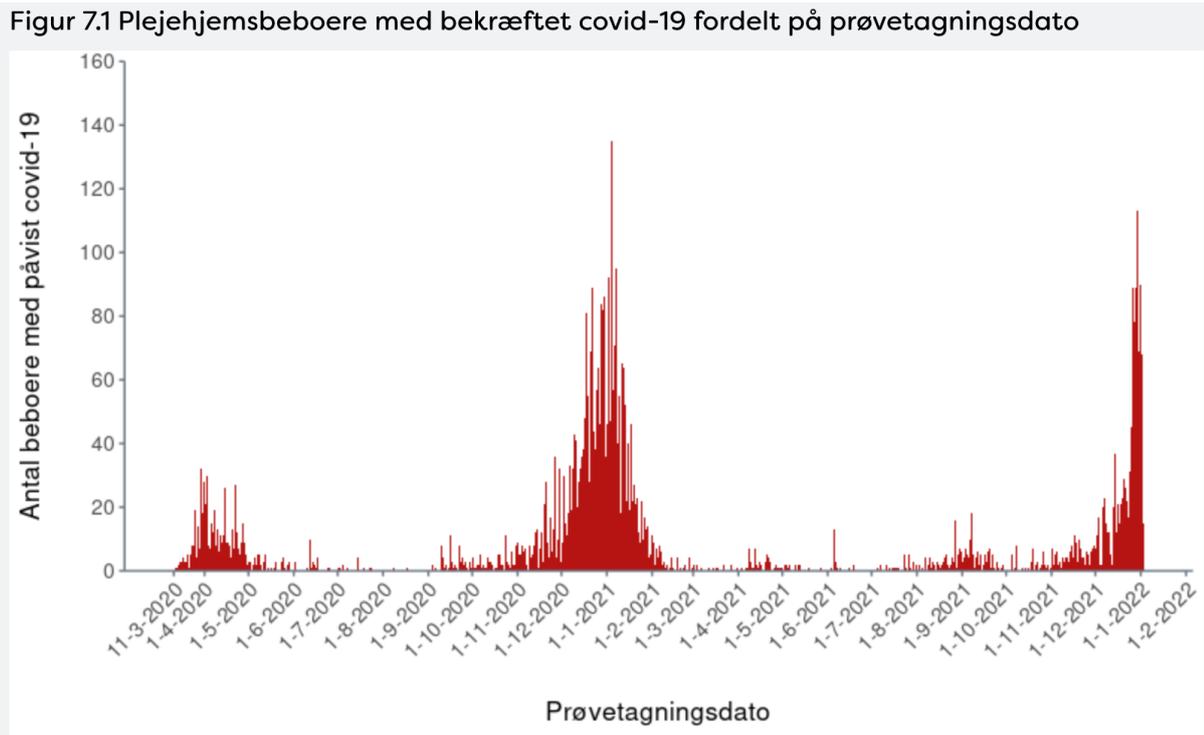
In DK, there is cautious optimism that although all hands are on deck, this could be the beginning of the end of the corona epidemic. More contagious, less severe.

The problem is that in the hospitals not all omicron has gone through the cycle of admission ic death.

Here I show data from nursing homes in DK that are hopeful:

<https://covid19.ssi.dk/overvagningsdata/ugentlige-opgorelser-med-overvaagningsdata-onder-covid-19> på plejehjem.

First the epidemic amongst residents:



Next the number of deaths per week:

Tabel 7.1 Antal bekræftede covid-19-tilfælde blandt plejehjemsbeboere i alt og fordelt på vaccinationsstatus, dødsfald blandt beboere med covid-19, antal plejehjem med bekræftede tilfælde, antal testede beboere og antal plejehjem med testede beboere.

År	Uge	Bekræftede tilfælde blandt beboere	Dødsfald blandt bekræftede tilfælde	Bekræftede tilfælde blandt beboere med fuld effekt efter primært vaccinationsforløb	Bekræftede tilfælde blandt beboere med fuld effekt efter revaccination	Plejehjem med bekræftede tilfælde	Testede beboere	Plejehjem med testede beboere
2021	48	54	6	8	40	30	9.070	601
2021	49	89	6	11	71	47	10.142	645
2021	50	136	9	17	112	61	12.183	693
2021	51	193	11	20	165	92	14.689	700
2021	52	596	12	52	517	204	20.918	746
I alt	nan	5.287	1.056	479	1.017	571	384.641	957

(Datakilde: Statens Serum Institut)

This is interesting because the infection/death ratio at week 48 (Delta) 54/6:CFR is approximately 10%.

But at week 52 (Omicron) this is 596/12: CFR is about 2%.

See also that 517 of the 596 infections occurred in those with full vaccination, so including booster.

It's a nice pseudo experiment: same population and circumstances, different virus, with different outcome

The same contrast has been used to show that Omicron is not necessarily more infectious but does break through the (booster) vaccination:

<https://www.medrxiv.org/content/10.1101/2021.12.27.21268278v1>

*Comparing households infected with the Omicron to Delta VOC, we found an 1.17 (95%-CI: 0.99-1.38) times higher SAR for unvaccinated, 2.61 times (95%-CI: 2.34-2.90) higher for fully vaccinated and 3.66 (95%-CI: 2.65-5.05) times higher for booster-vaccinated individuals, demonstrating strong evidence of immune evasiveness of the Omicron VOC. Our findings confirm that the **rapid spread of the Omicron VOC primarily can be ascribed to the immune evasiveness rather than an inherent increase in the basic transmissibility***

Ep 216-3: An interesting view from the Netherlands (in Dutch, contributed by P Van Damme)

about communication to the population about the importance of the booster shot and how to explain this importance in the right way. Definitely worth listening to/watching.

https://www.npostart.nl/nieuwsuur/04-01-2022/VPWON_1334400

The communication expert explains it very well. If you emphasize the free will of people too much, you won't get much of it. When we vaccinate kids, it's just to get a reasonable vaccination rate, to help reduce circulation; If at least 50% of our children have already experienced between 5 and 11 covid, then 1 vaccination will provide a good hybrid immunity, which will be protective against omicron. So a wall can be built quickly, also in this age group.

Ep 216-4: Vaccination of children

- 1) An interview with Dr Hills (Columbia), pleading for vaccination in children, because in New York they see a huge surge of hospitalization of unvaccinated children (contributed by P Smits).

<https://www.youtube.com/watch?app=desktop&v=jXymNkUDJFY>

2) Point of view of Dr. Plotkin (contributed by P Vandamme)

My view is that children should receive vaccination because

1. There is a considerable amount of disease in them, particularly recently.
2. They will grow up and socialize.
3. We need as much immune population as possible.
4. The omicron variant will ultimately infect them anyway, and they are better off undergoing infection when vaccinated.
5. Actually, I don't think this is always true that infection protects better than vaccination, judging from the numbers of reinfections. COVID is a mucosal infection, not viremic, so reinfection can take place unless the individual has a broad immune response. Mucosal infections often do not leave permanent immunity, and a single dose of vaccine is recommended post-infection to assure a high immune response. Also, the more virus excreted by children the more exposure to their parents and grandparents. Letting children act as disseminators would work only if infection in older people is harmless.

By the way, I am switching my attention from variant-specific vaccines to vaccines that might protect against all betacoronaviruses, for which there have been promising publications on how to do that from several laboratories. We can't keep on chasing mutations.

CDC Recommends Pediatric COVID-19 Vaccine for Children 5 to 11 Years

Media Statement

For Immediate Release: Tuesday, November 2, 2021
Contact: [Media Relations](#)
(404) 639-3286

Today, CDC Director Rochelle P. Walensky, M.D., M.P.H., endorsed the CDC Advisory Committee on Immunization Practices' (ACIP) recommendation that children 5 to 11 years old be vaccinated against COVID-19 with the Pfizer-BioNTech pediatric vaccine. CDC now expands vaccine recommendations to about 28 million children in the United States in this age group and allows providers to begin vaccinating them as soon as possible.

COVID-19 cases in [children](#) can result in hospitalizations, deaths, MIS-C (inflammatory syndromes) and long-term complications, such as "long COVID," in which symptoms can linger for months. The spread of the Delta variant resulted in a surge of COVID-19 cases in children throughout the summer. During a 6-week period in late June to mid-August, COVID-19 hospitalizations among children and adolescents [increased fivefold](#). Vaccination, along with other preventative measures, can protect children from COVID-19 using the safe and effective vaccines already recommended for use in adolescents and adults in the United States. Similar to what was seen in adult vaccine trials, vaccination was nearly 91 percent effective in preventing COVID-19 among children aged 5-11 years. In clinical trials, vaccine side effects were mild, self-limiting, and similar to those seen in adults and with other vaccines recommended for children. The most common side effect was a sore arm.

COVID-19 vaccines have undergone – and will continue to undergo – the most intensive safety monitoring in U.S. history. Vaccinating children will help protect them from getting COVID-19 and therefore reducing their risk of severe disease, hospitalizations, or developing long-term COVID-19 complications. Getting your children vaccinated can help protect them against COVID-19, as well as reduce disruptions to in-person learning and activities by helping curb community transmission.

Distribution of pediatric vaccinations across the country started this week, with plans to scale up to full capacity starting the week of November 8th. Vaccines will be available at thousands of pediatric healthcare provider offices, pharmacies, Federally Qualified Health Centers, and more.

The following is attributable to Dr. Walensky:

“Together, with science leading the charge, we have taken another important step forward in our nation’s fight against the virus that causes COVID-19. We know millions of parents are eager to get their children vaccinated and with this decision, we now have recommended that about 28 million children receive a COVID-19 vaccine. As a mom, I encourage parents with questions to talk to their pediatrician, school nurse or local pharmacist to learn more about the vaccine and the importance of getting their children vaccinated.”

And finally a number of papers that plead for vaccination vs infection

<https://directorsblog.nih.gov/2021/06/22/how-immunity-generated-from-covid-19-vaccines-differs-from-an-infection/amp/>

https://covid.joinzoe.com/post/covid-vaccine-natural-immunity-difference#part_3

<https://publichealth.jhu.edu/2021/why-covid-19-vaccines-offer-better-protection-than-infection>

<https://www.henryford.com/blog/2021/10/natural-antibody-protection-vs-vaccine-protection>

<https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/covid-natural-immunity-what-you-need-to-know?amp=true>

<https://www.nebraskamed.com/COVID/covid-19-studies-natural-immunity-versus-vaccination>

Ep 216-5: A very elaborated hypothesis and proposed protocol by Dr. Huighebaert

Should we rinse, gargle and nebulise saline to treat and contain SARS-CoV-2 infection?

The objectives of this review are to evaluate the benefits of this cheap intervention in COVID-19 and to develop a best protocol for its use and validation. Contributions and both revising and contributing authors are welcome.

See [Ep 2016-5](#) for full text on the website.

The text has not yet been peer-reviewed. For input, objections, additional studies, or any useful information, please send your contribution or comments to: salinecov19@gmail.com (or to s.huighebaert@gmail.com)

SYNOPSIS

- 1) Epidemiological data from UK and Denmark confirm that omicron is less severe, but we’ll have to see what the effect will be of school reopening and extension of the epidemic into the elderly population, which remains vulnerable.
- 2) Although it is very evident that basic and booster vaccination cannot stop omicron, it has also been shown that it significantly contributes to mitigating the disease. There remains a lot of hesitation and controversy about the vaccination of children, but there are good arguments to go for it.
- 3) Besides vaccination, “respiratory hygiene” is an important tool to reduce the burden of respiratory infections. Very strict NPI, such as social distancing and banning of indoor gatherings, cannot be maintained forever. Other more “elegant” measures need to be considered, but it is more difficult to prove the effects of various types of face masks, ventilation, air purification, saline etc. More research is needed here....

Best wishes

Guido