Twitter Thread by Yaneer Bar-Yam



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UK variant update:

50% more contagious and the main difference is in the rate of infection in children up to the age of 9.

No significant difference found yet in clinical course, mortality within 28 days or chance of re-infection.

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https://t.co/D8DXVvBeew

Public Health England

Protecting and improving the nation's health

Investigation of novel SARS-CoV-2 variant

Variant of Concern 202012/01

Technical briefing 2

50% higher infection rate

(Secondary attack rate 15.1% versus 9.8%)

Secondary attack rates

We investigated secondary attack rates using data from NHS Test and Trace, the national contact tracing system in England. Between 5 October and 6 December 2020, 1,105,388 cases were reported to NHS Test and Trace; 46,237 (4.2%) had genomic sequencing data (around 700 (1-2%) poor quality). 1,978 had the variant (VOC 202012/01), 4.3% of those with sequencing data.

228,361 (9.9% attack rate) of all contacts notified by cases in this period became cases:

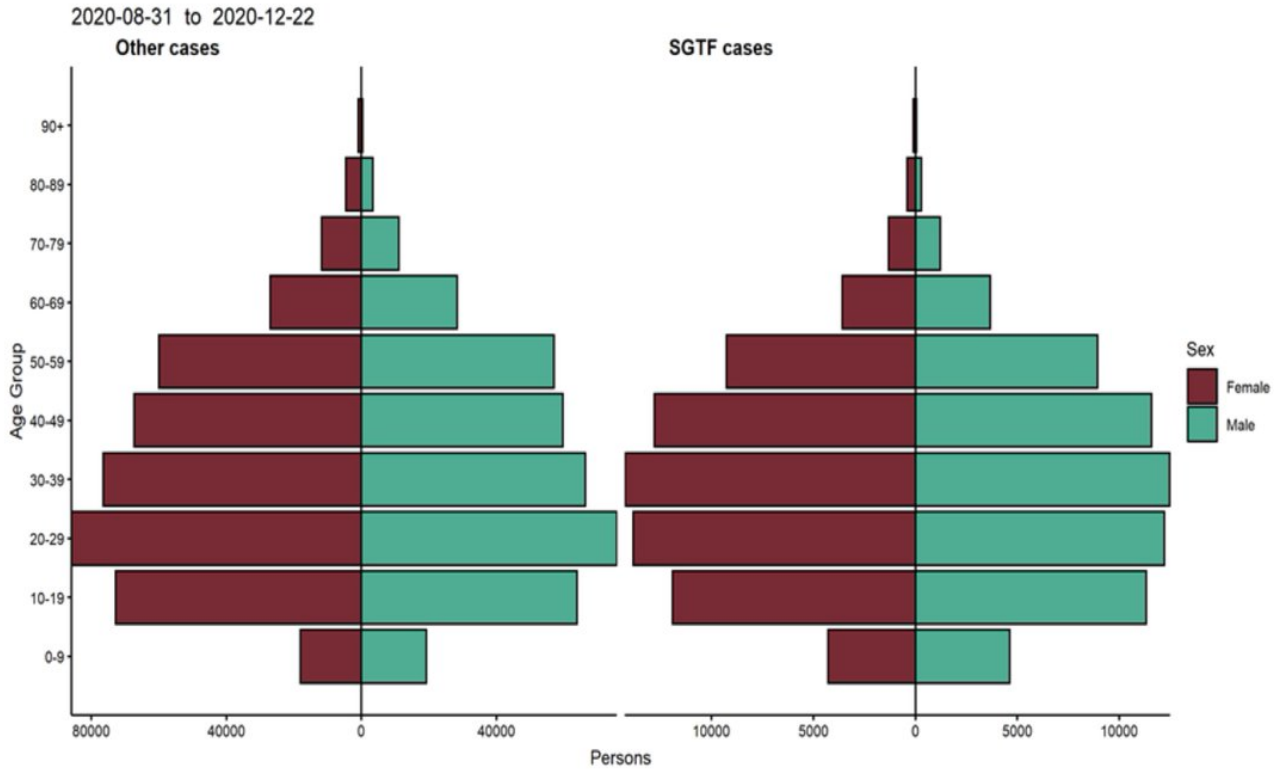
- 15.1% among those whose index case was confirmed to have the VOC 202012/01
- 9.8% among those whose index case was sequenced and confirmed with other variants

Main effect in children under 9 years old

(see age distributions, second image has overlay of reference onto UK variant)

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Figure 4. Age-sex pyramid of cases tested by laboratories using Thermofisher TaqPath, by S-gene detection



TaqPath labs = Alderley Park, Milton Keynes and Glasgow Lighthouse Labs.
Cases deduplicated to one positive test for entire time period, prioritising SGTF tests where individuals test positive multiple times.
Data source: SGSS. Age and sex missing in 5227 persons, excluded from figure.

Essential to stop the UK variant: 50% higher transmission will lead to more cases, more hospitalizations, more ICU cases, more deaths, and greater economic costs.

Independent SAGE's plan for the UK variant

With the new Covid variant everywhere, it's not enough to just wait for the vaccine | Stephen Reicher

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https://t.co/cF1HPC3U2l

1)Accelerate vaccinations
2)Control: a) Advance application for travel to and from the UK, a negative PCR test prior to travel, managed isolation on arrival b) Schools should remain closed until buildings are made as safe as possible for pupils and staff
c)Universities online

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3) test,trace,isolate: a)Test, b)Trace contacts as quickly as possible, isolate before they can infect others. Include forward tracing (identifying who you might have infected) and backwards tracing (who infected you), c)Practical support to isolate

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4) Provide guidance for workplace safety.
5) Provide financial support for the public.

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Compare
■higher fatality, with
■increase in transmissibility ON fatality.

Example:
50% higher fatality increases deaths from 129 to 193.
50% higher transmissibility increases from 129 to 978 after one month, more if longer

See:
https://t.co/MYiQUL804z

> A good thread on why a 50% increase in infectivity results in many more dead people than a 50% increase in IFR https://t.co/im4S3l5BR1
>
> — John Locke@Home (@jlz0z) December 29, 2020