

The second wave and the urgent need to tighten social-distance measures

Prof John Edmunds

19th September 2020

Current UK epidemiological picture

- Cases are increasing rapidly across the country. This has already led to an increase in hospitalisations and an increase in patients requiring intensive care.
- Cases are increasing in all age groups¹, including the elderly, and PHE has reported a very large increase of incidents in care homes in their latest report¹.
- Latest estimates suggest that the epidemic is doubling every 7-8 days².
- Only around 7% of the population have been infected. Yet, around 50,000 have died. Letting an epidemic run in the remaining 93% would result in around half a million deaths.

The need for a package of measures

- The lockdown in March can be thought of as a combination of many different social distance measures, from banning contact within other people's homes, to tele-working, closure of the entire hospitality sector and non-essential retail as well as closure of all educational facilities, etc.
- All of these measures combined, reduced R to about 0.7. That is, to meet HMG's aim of keeping R below 1 a large package of interventions will have to be implemented, not just one or two. If educational institutions are to remain open then a very wide package of other interventions will be essential.

Imperative for speed of action

- The response to this increase in cases needs to be fast and large. The harder the measures, the less time they need to be in place for.
- The UK responded slowly in March and paid a heavy price for this in terms of deaths (figure 1a, which is taken from an FT article – note the log scale). This shows – unambiguously – that the key factor for the large number of deaths in the UK was the lateness of our response. We should not make the same mistake again.
- Immediate action has an enormous impact when cases are increasing exponentially, which they are now. Figure 1b shows the effect of an immediate circuit breaker (two week lockdown). Any delay will result in far more cases (dotted line on Figure 1b) and therefore hospitalisations and deaths. No intervention would be disastrous (blue line).

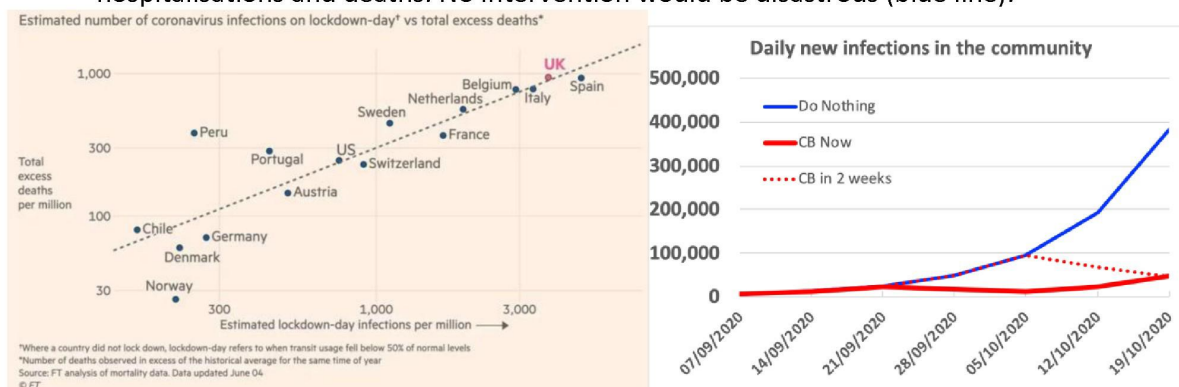


Figure 1 (a). International comparison of timing of lockdown and death rates (from³); (b) illustrative impact of “circuit breaker” lockdowns on infections in England.

References

- 1) <https://www.gov.uk/government/publications/national-covid-19-surveillance-reports>
- 2) <https://www.gov.uk/government/publications/react-1-study-of-coronavirus-transmission-august-2020-results/react-1-real-time-assessment-of-community-transmission-of-coronavirus-covid-19-in-august-2020>
- 3) <https://www.ft.com/content/6b4c784e-c259-4ca4-9a82-648ffde71bf0>