

Review of: "Excess cases of influenza suggest an earlier start to the coronavirus epidemic in Spain than official figures tell us: an analysis of primary care electronic medical records from over 6 million people from Catalonia"

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This is a neat article providing evidence that early coronavirus cases in Spain were being misdiagnosed as influenza - and by implication the covid outbreak started earlier than official statistics imply.

The methodology is essentially curve fitting: the flu epidemic went on longer than previous ones. The authors are selective is choosing those previous flu outbreaks to match to, and the logic seems to run "we only chose the ones which look the same, then we show that they don't look the same" which is not so convincing.

With this debatable level of analysis, I would need to see a very strong signal for the results to be credible. And indeed, the signal is very strong: over thousands of cases of flu, the total number halves in the week of March 15th. These are big numbers, carefully corrected, implying low systematic error, so I would regard the correlation as statistically well proved.

Trying to avoid the correlation-causation fallacy, I think one should consider whether the flu epidemic was curtailed unnaturally quickly by anti-COVID measures, formal or informal. This depends on whether the anomaly on the flu data (fig 2) is that it extends too long, or drops to fast. The selective choice of previous flu seasons used to establish "expected cases" gives more scope for ambiguity here than Fig 2 and, especially, Fig 3 suggest.

In any case, its an interesting data feature which is well worthy of attention. Although not 100% convince, I'm inclined to believe the authors interpretation of misdiagnosed covid is correct.

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