Twitter Thread by Simon Nicholls

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Most ■ comparisons for C19 go wrong as they don't considering demographics.

For countries I've managed to src detailed death data for, here's total d/1m numbers.

Sure,■■■■■■■■■■■■■■■ look similar to ■■■■, but just look at the differences <60, ■■ 4x larger.

So what does this mean?

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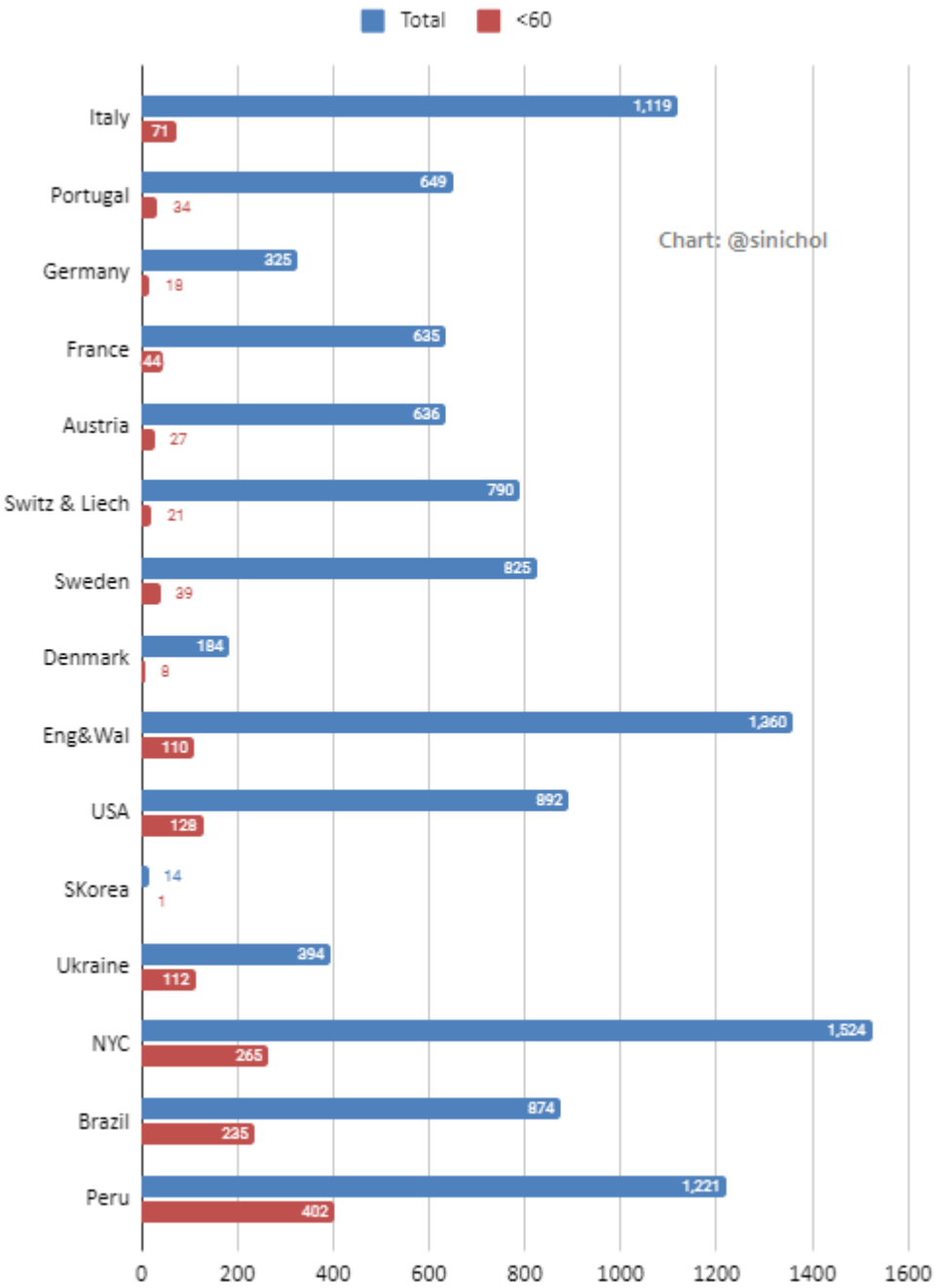

Basically, fewer >80, means they've had■spread, and ■younger deaths, but■equal.

Here ranking■2■by age are:
■■20 countries
■■NY city
■■The World
That I've ■at so far.

50% marks the median age, e.g.
■■ 47
■■■■■■■■■■■■■■■41
■30
■■18

So expecting similar deaths overall is silly.

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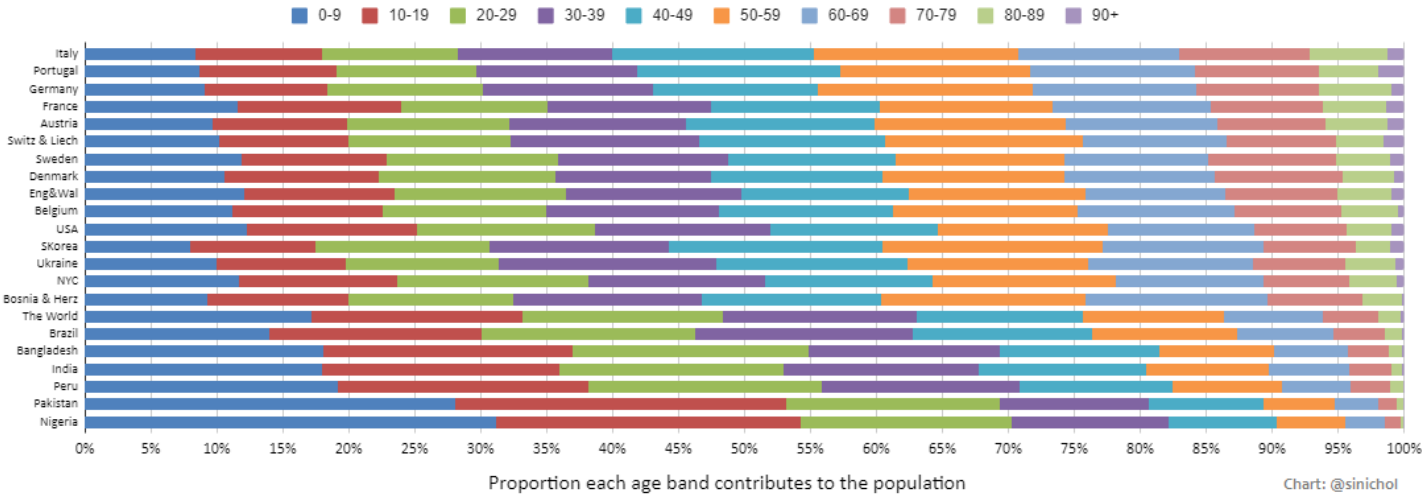

So how have deaths actually played out?

Here are the props. by age to late Dec for places with detailed data.

Looks like NYC, ■■ & ■■ have seen far more in the young.

Now these all have younger pops. so is spread the same? Are diff just down to demographics?

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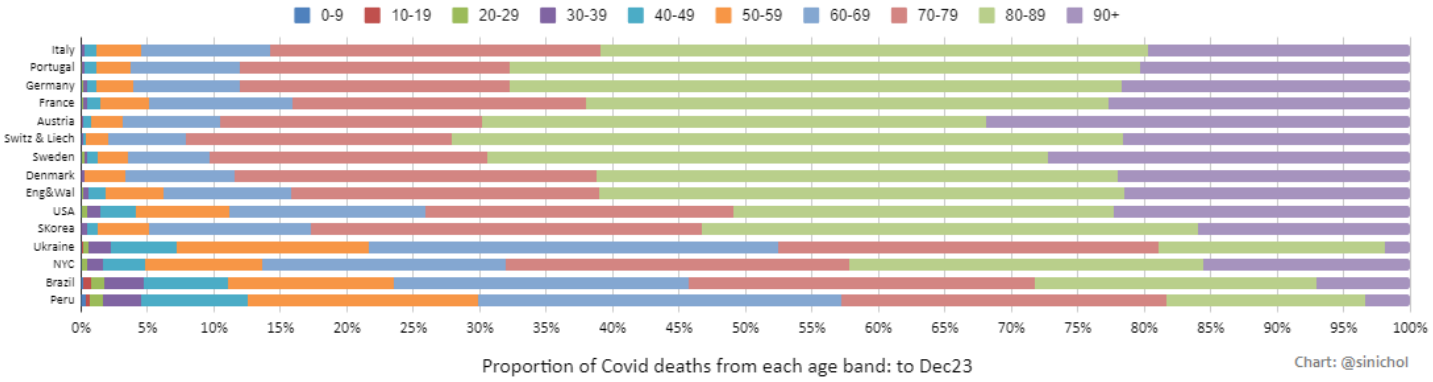

No, many factors, the biggest age, and the likelihood of death in each age band.

■serology studies have sampled a similar risk in each 10yr band, with this going up 3 fold with each band.

Here is a plot of what■avgs are.

So what else do we need to worry about?

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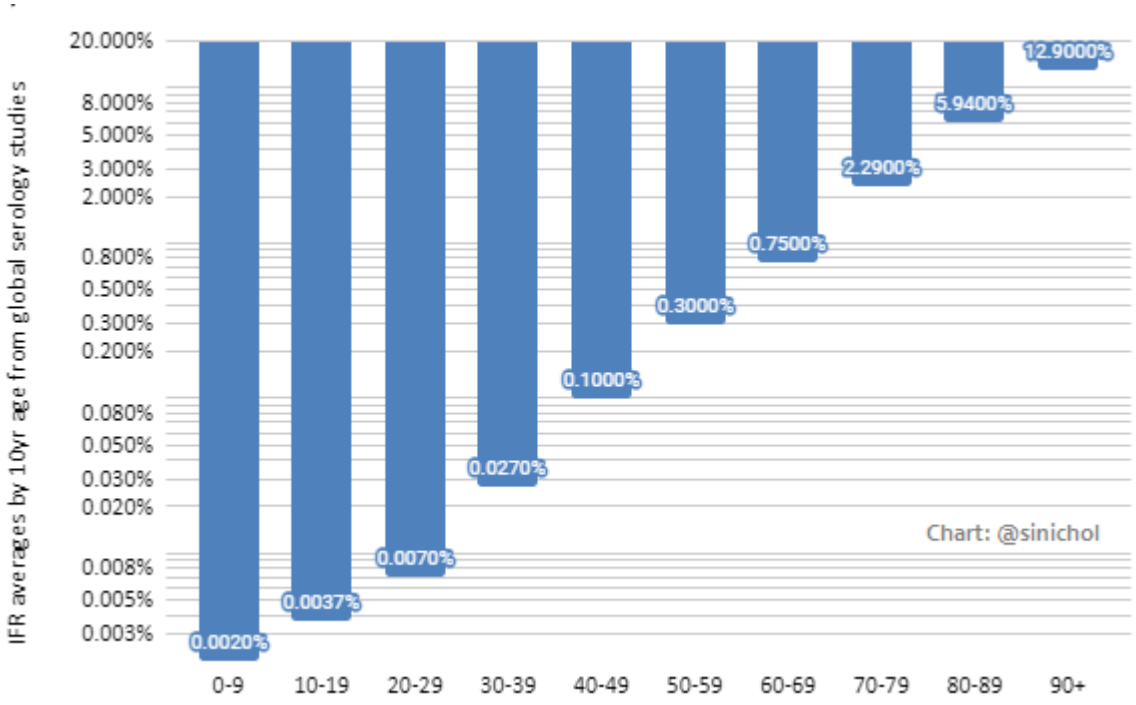

Factors like:

■■healthcare: beds nos, better care, etc

■■comorbidity rates: e.g. obesity, OECD 4x India, but only effects 15%

■■lifestyle impacts: carehomes VS elderly@home

etc

But, many cancel out.

e.g. 1st■better healthcare, but fatter.

What about a lack of treatment?

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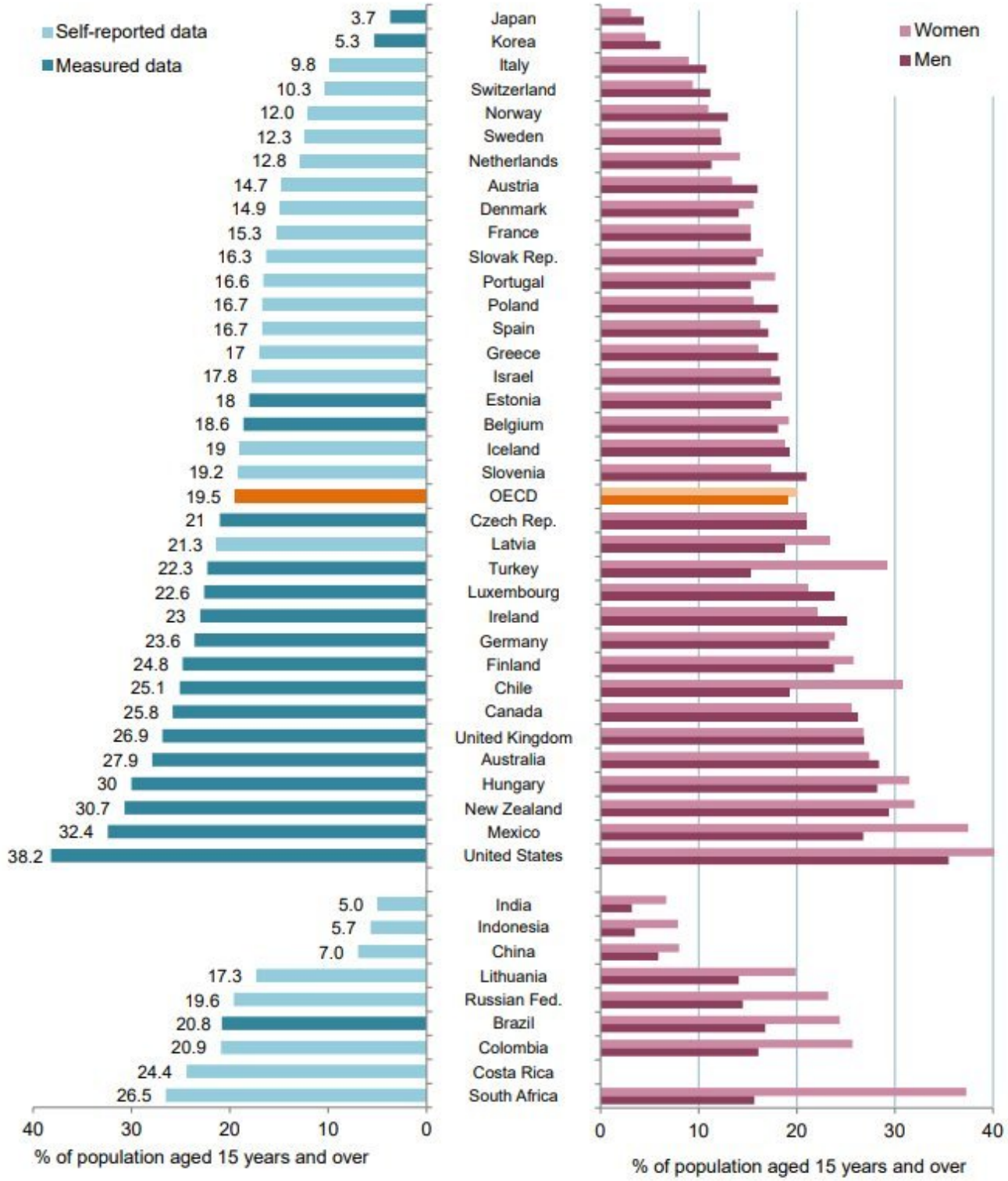
Figure 1: Obesity among adults, 2015 or nearest year



Source: OECD (2017), OECD Health Statistics 2017 (Forthcoming in June 2017).
www.oecd.org/health/health-data.htm
Note: The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Worst case, ■■ HFR is 15%, with 50% needing O2, so 3x die without hosps.

But, ■■■■etc data is hosp data, they don't have near realtime all-cause like 1st■.

So■the IFRs of deaths per band likely far more similar.

We'll see for NYC vs ■■ likely, ■■ not so sure.
■of■

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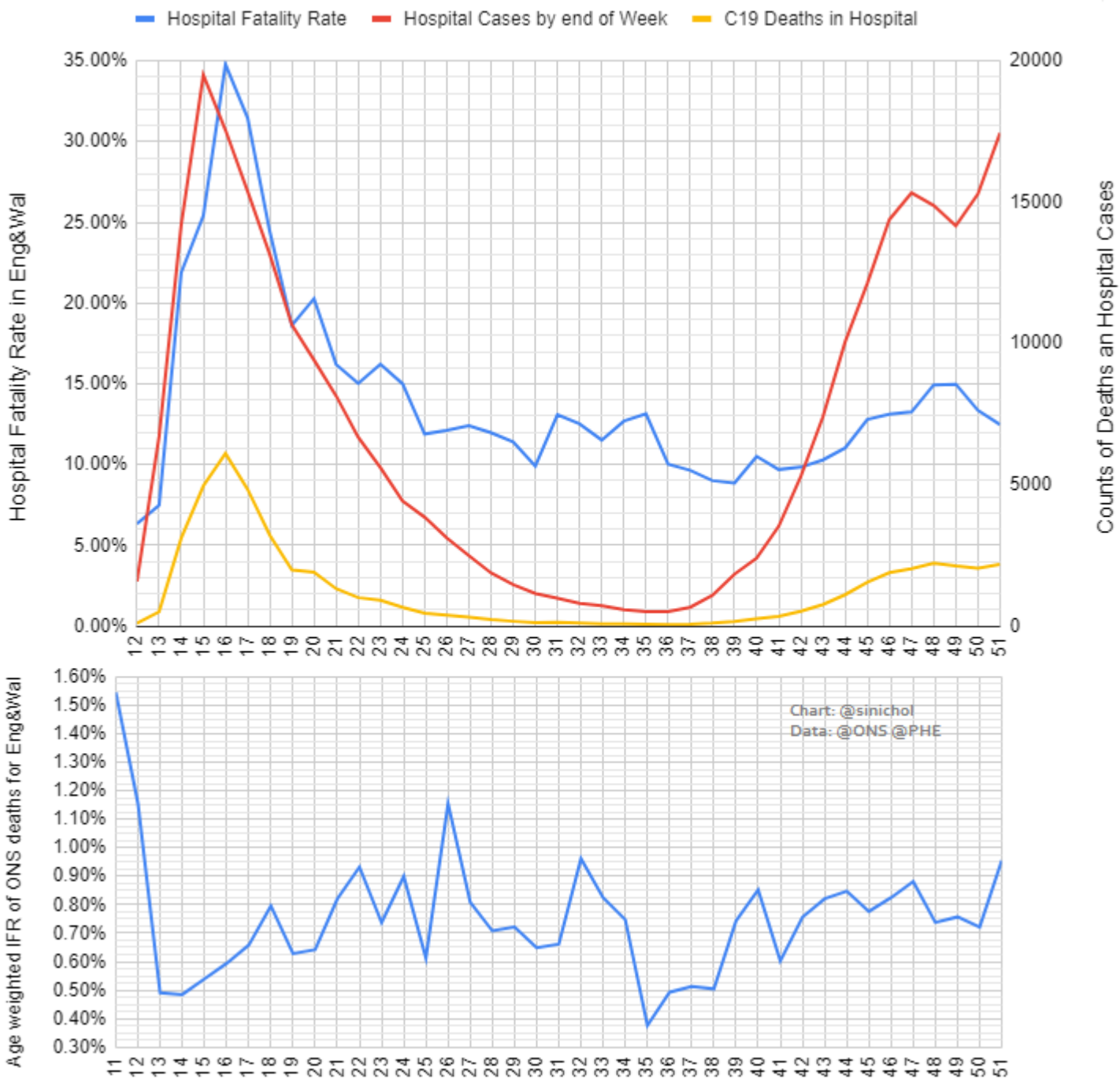

So, keeping that in mind, let's est:
■■Pop. IFR for equal spread (IFRp)
■■The wgted IFR of deaths, where avail (IFRd)

Range is:
■■0.9%
■■0.09%

Just 1/10 the pop. capacity!

FYI, a■dIFR/pIFR means they've had relatively■older deaths.
e.g. ■■■■, caveat most have■deaths.

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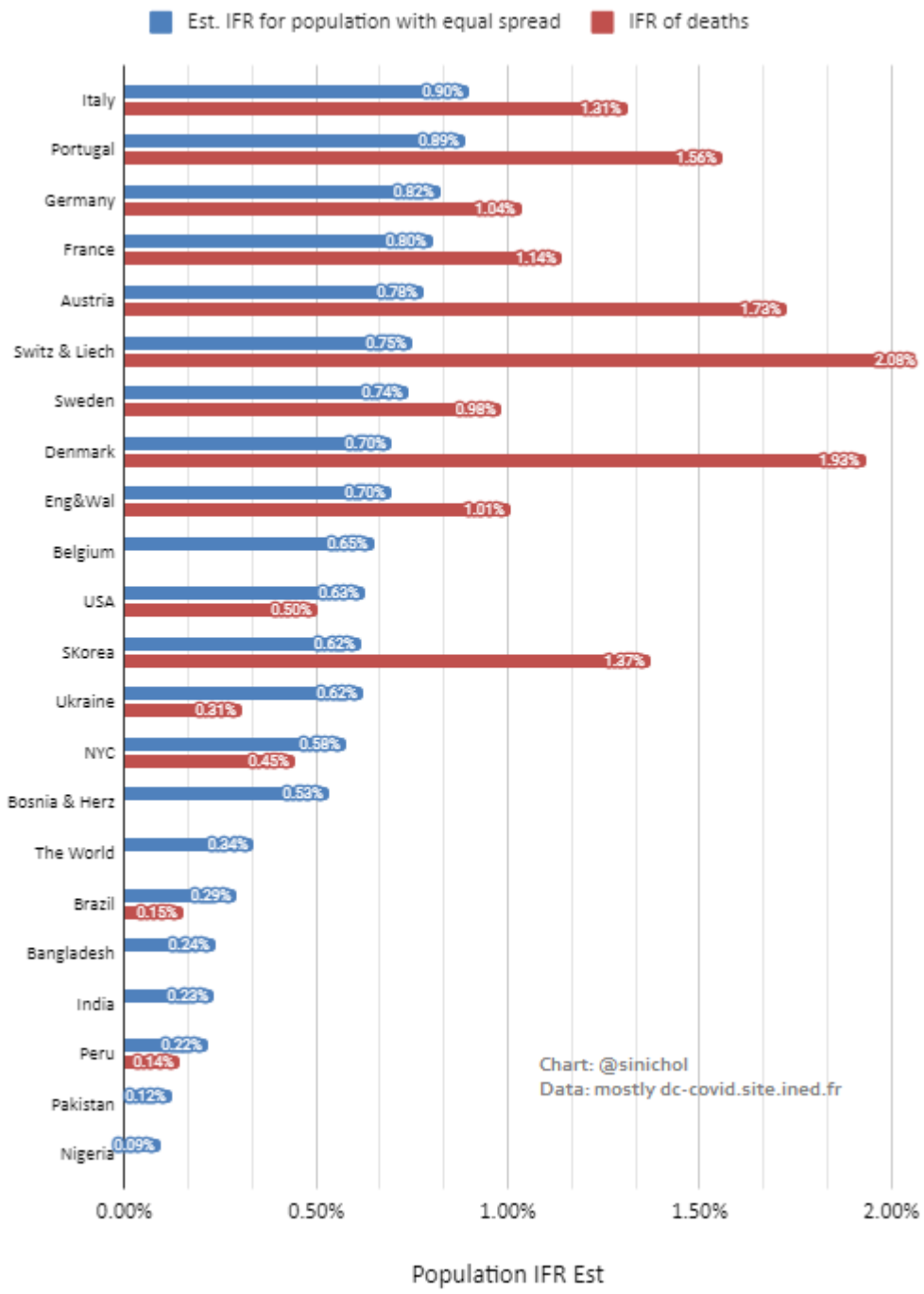

Further:
■■% of possible deaths
■■% of spread

100% susceptibility unlikely. Sure, IgA/Tcell resistance possible, but, regardless:
■■implied spread varies hugely
■■NYC's alone suggests ■■ more spread likely

■■If ■■, not healthcare diffs, likely only one near true HIT.

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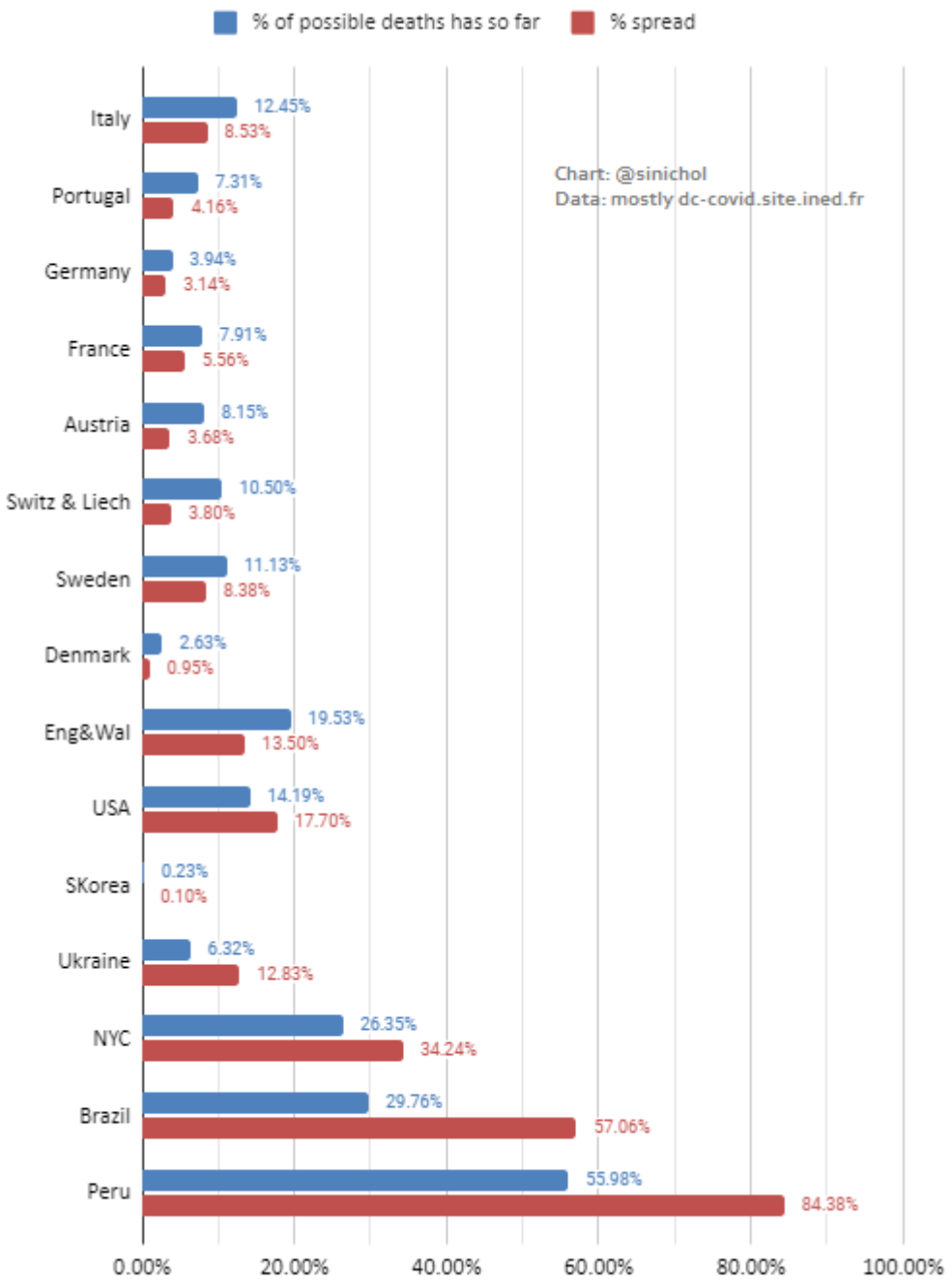

Finally, here's how each age fared rel. to■■■■■■■■■■■■■■■

■■Per 2/9 1/5 >80, means ■■■■■ much■per band

■■NYC worse, likely■density & slower LD speed

■■NYC&■■ so similar!? Favellas as dense? Same work ethic?

■■■■■similar to■■■■■■■■■■■■■■■, protected old better

■■■■■ more LD, bad at CHs

■■■■■ best

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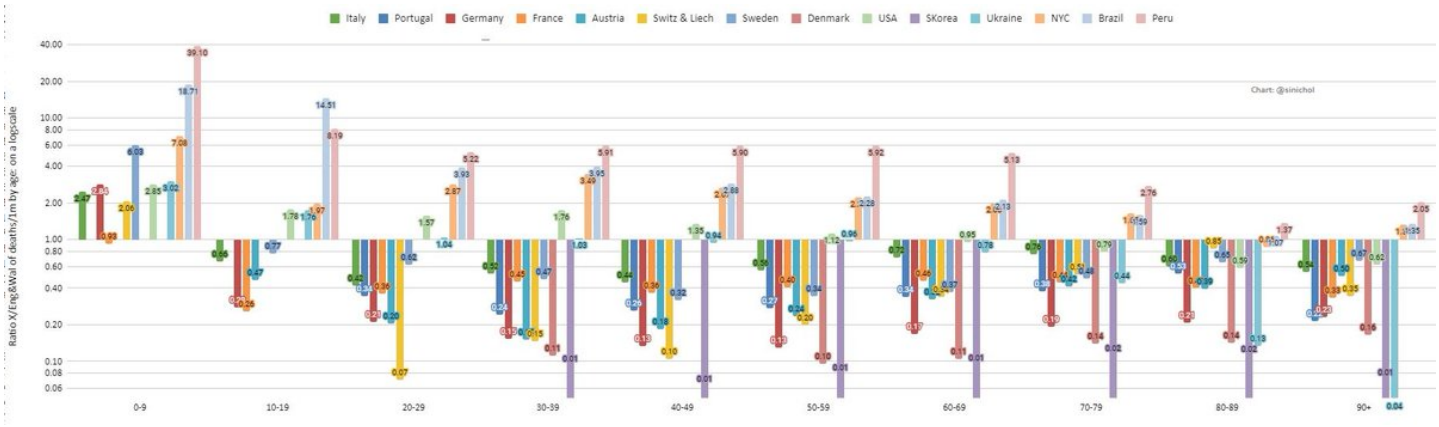

Summary, all correlated, not causal.

But, all comparisons must remove big factors for diff■
e.g. demographics.

Once you do, assumption flaws become evident.
e.g. ■■ either
■■worse healthcare outcomes
■■or, LD was not effective

Reality, spread■in 2nd/3rd■than deaths imply.