

Trusting the numbers and tackling misinformation: perspectives of a data journalist

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- Background of covid mortality in india
- Background of counting deaths
- Work of journalists
- Work of academics
- How to build public trust + engage with govt?

Background of covid mortality in India

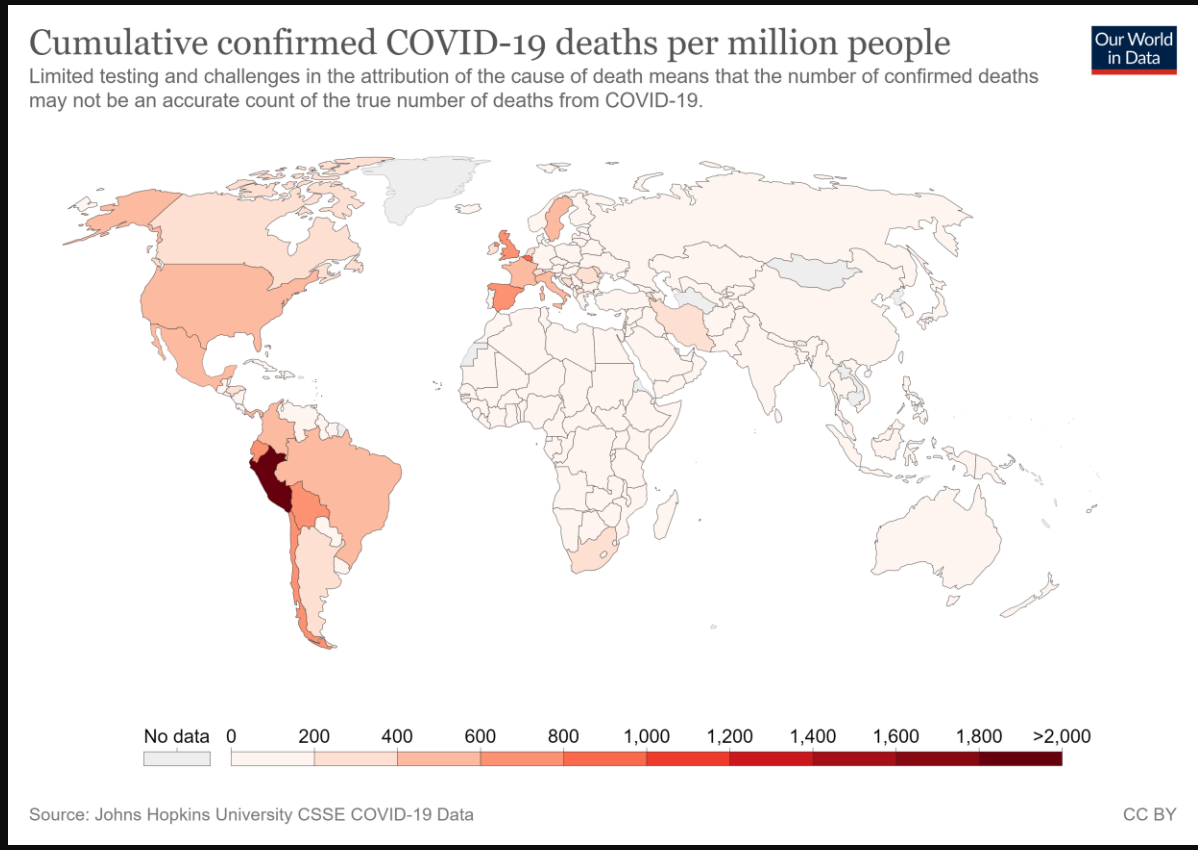
From early on, IFRs become clear

However, the need to rely on CFRs

Also became clear that India was an outlier

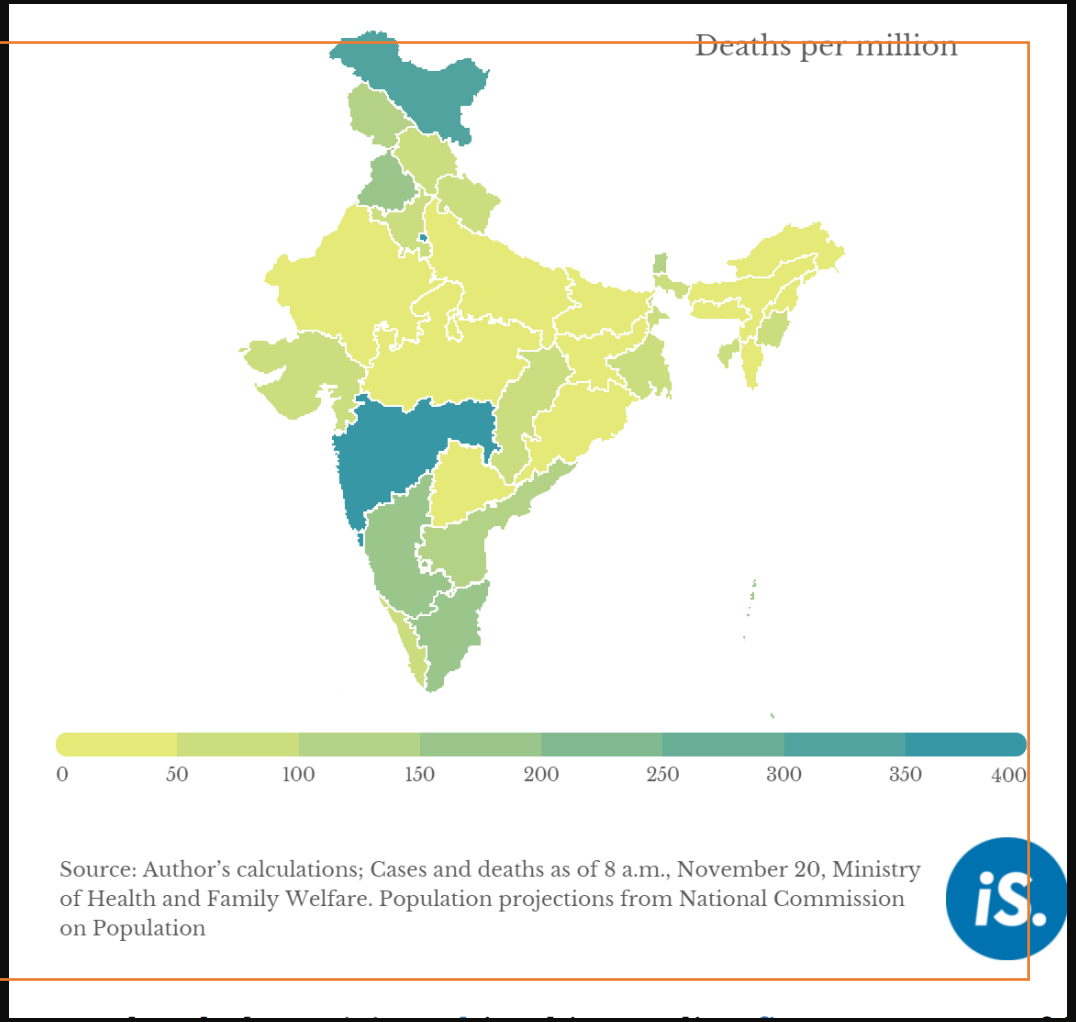
The Outlier

- By the end of the first wave, India had among the lowest mortality rates proportionate to its population



The further Outliers

- It was also clear that there were inexplicable inter-state differences

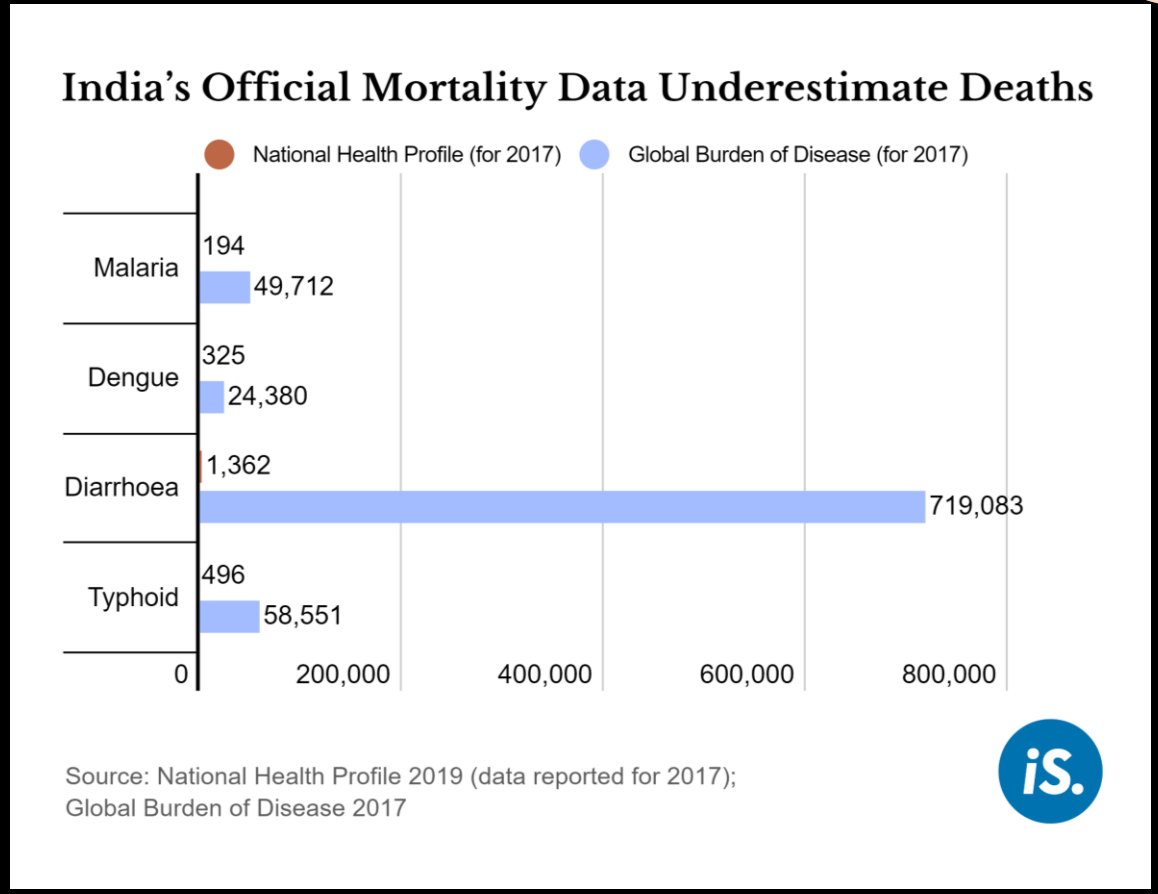


Why?

- Was there something exceptional about India?
- Was there something exceptional about the data

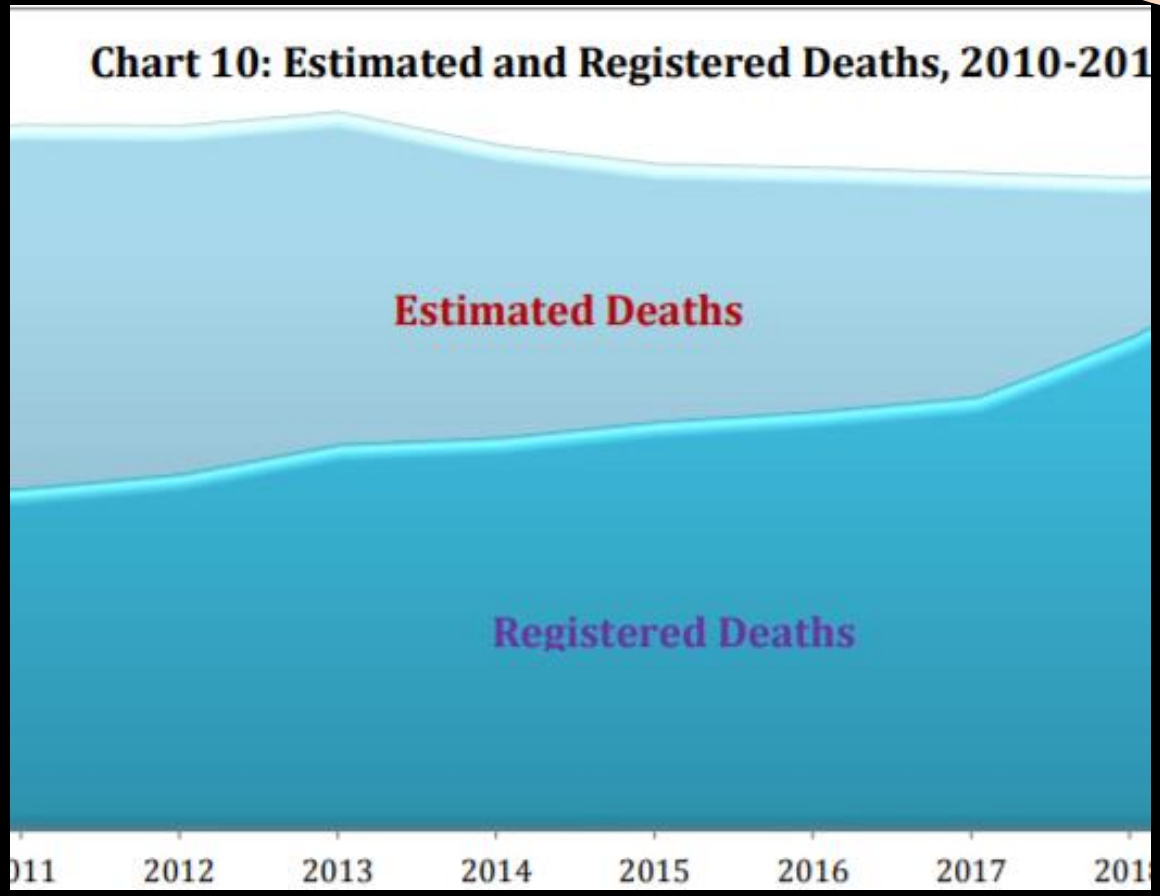
Reasons for Scepticism #1

India undercounts deaths from all infectious diseases



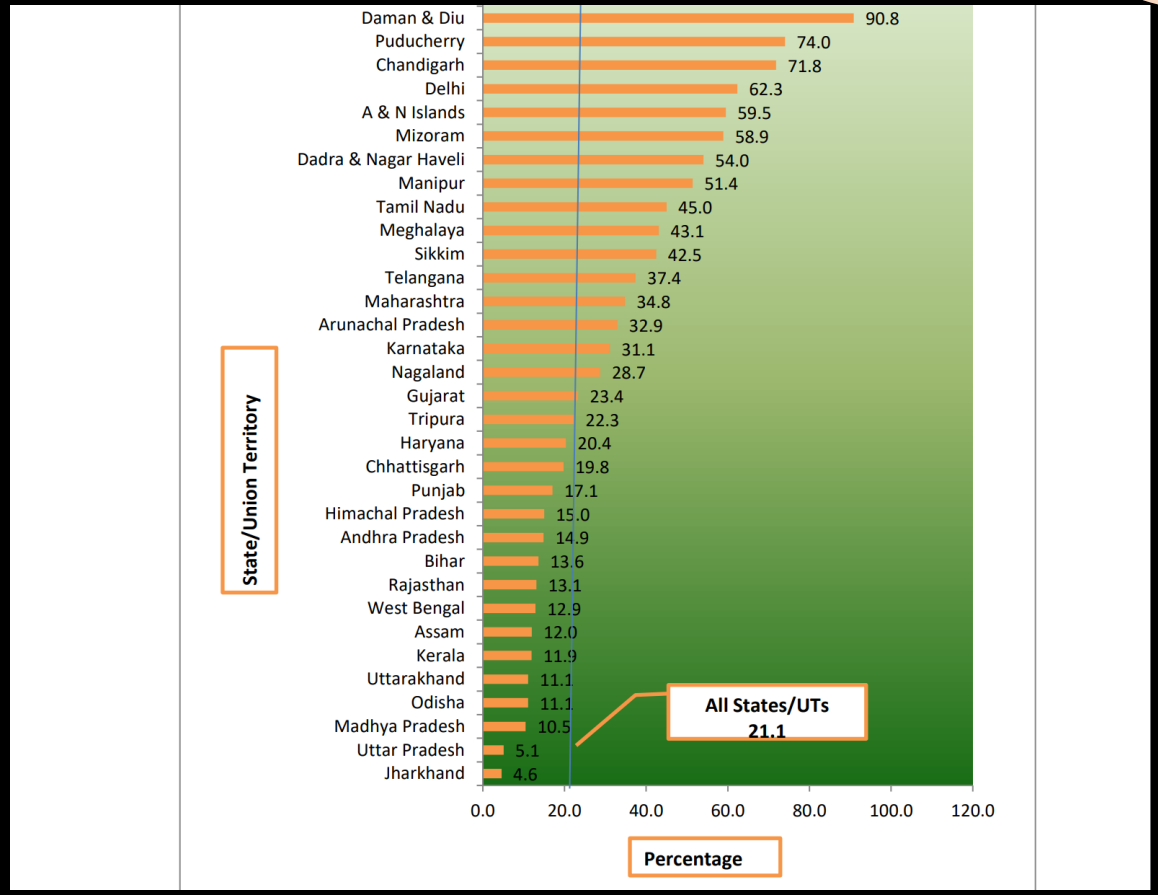
Reasons for scepticism #2

#2: India undercounts all deaths



(contd.)

Further issues with medically certifying deaths



Reasons for scepticism

#3: Pandemic-specific

National Centre for Disease Informatics and Research. Written in jargon free and simple language complete with examples of various scenarios that doctors and hospitals might face, the document makes four important points about recording COVID-19 deaths:

- Even if a COVID-positive person dies without symptoms of the disease, the death should be recorded as a COVID-19 death under U07.1, the World Health Organization's (WHO) International Classification of Diseases (ICD-10) code for a confirmed COVID-19 death.
- Even if a positive patient appears to die of respiratory failure, the underlying cause of death--as distinct from the mode of death--should be listed as COVID-19.
- If a COVID-positive person has comorbidities, the patient has a higher risk of dying of respiratory failure. But the comorbidities should not be listed as the underlying cause of death; the cause of death remains COVID-19.

And then the second wave hit…

- Became clear that deaths were being missed
- First attempts at tallying from crematoria
- Discussions about using the CRS

How people came together: the Kerala doctors story

- Observed mismatch between official reports and what they could see in their communities
- Novel use of obituaries, news reports, informal networks
- Open spreadsheet that could be rechecked
- Difficulty of relying on data that isn’t mandated to be published



മൂന്നു വേര്‍ കൂടി മരിച്ചു

വിഴിഞ്ഞം● കോട്ടപ്പുറത്തു രണ്ടു പേരും കോവളം തൊഴിച്ചലിൽ ഒരാളും കോവിഡ് ബാധിച്ചു മരിച്ചു.

കോട്ടപ്പുറത്ത് വിള തുലവിളയിൽ ശബരിയാർ(65), കോട്ടപ്പുറം വടയാർ പുരയിടത്തിൽ സ്റ്റീഫന്റെ ഭാര്യ സിൽവമ്മ(80), കോവളം തൊഴിച്ചൽ മുളവിളാകത്ത് അശ്വതി ഭവനിൽ ലോചനൻ(93) എന്നിവരാണ് മരിച്ചത്.

22 മുതൽ മെഡിക്കൽ കോളജ് ആശുപത്രിയിൽ ചികിൽസയിലായിരുന്ന ലോചനൻ 29നാണ് മരിച്ചത്. ഭാര്യ: കൃഷ്ണമ്മ. മക്കൾ: രേണുക, രമ, രാജു, രാജീവ്, രതീഷ്.മരുമ

ലോചനൻ, ശബരിയാർ

യമ്മ. മരുമക്കൾ: സ്റ്റെല്ല, ലത, ദാസൻ. മെഡിക്കൽ കോളജിലേക്കു

How people came together: the excess mortality story

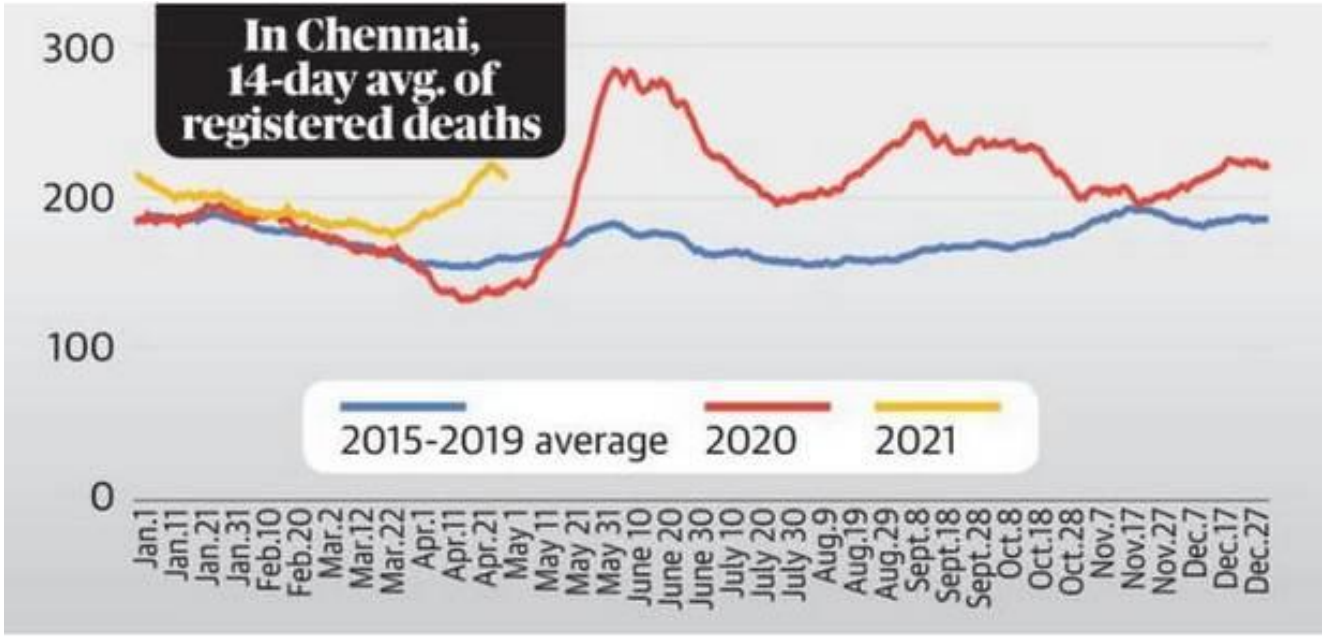
- Differences between official tolls and what people were seeing in crematorium and burial ground registers
- Brainstorming around novel methods to collect mortality data
- Multiple approaches and a new conversation

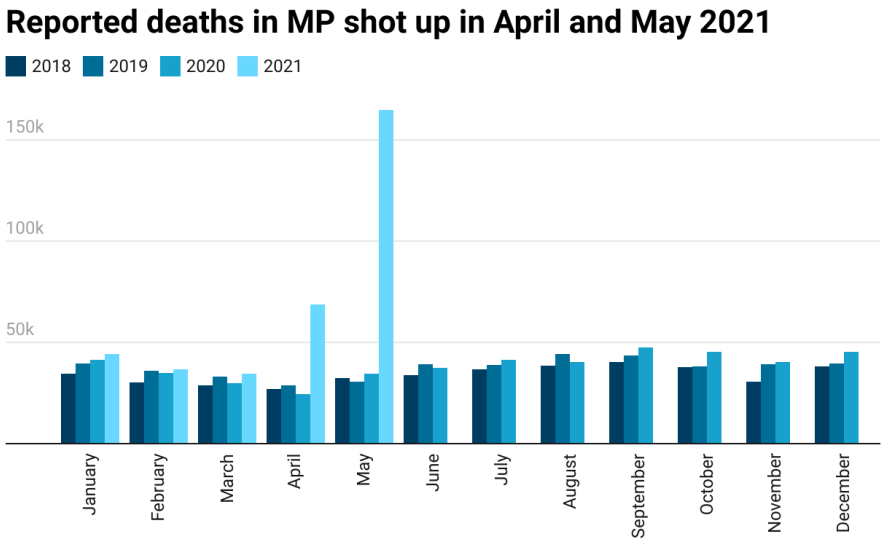


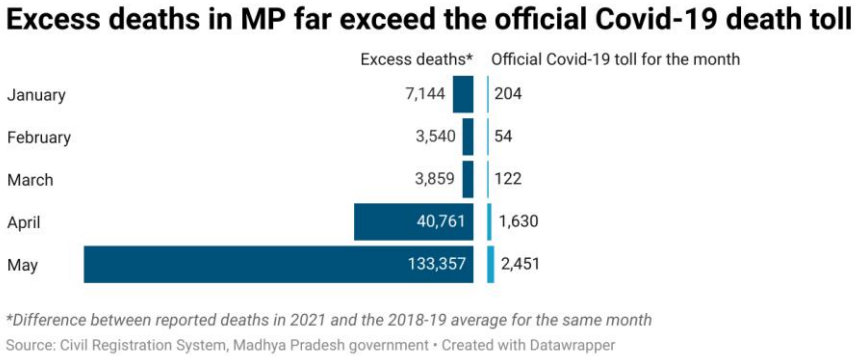
What we did using the CRS

- Under RGI but decentralised to states
- Recent improvements in computerisation and online linkages
- Chennai data extracted from GCMC website
- MP, AP and TN using CRS
- Other states using CRS – directly + RTIs

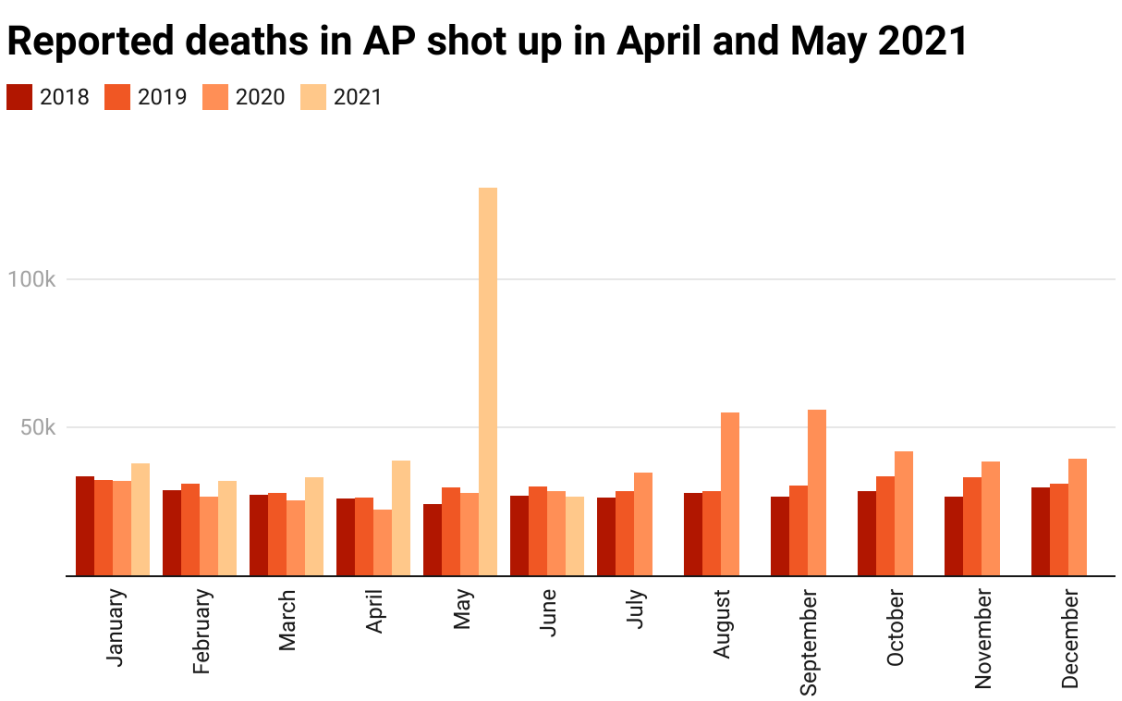
1. Chennai – 12,000 excess deaths in 2020 vs 4,000 official covid deaths
2021 mismatch larger

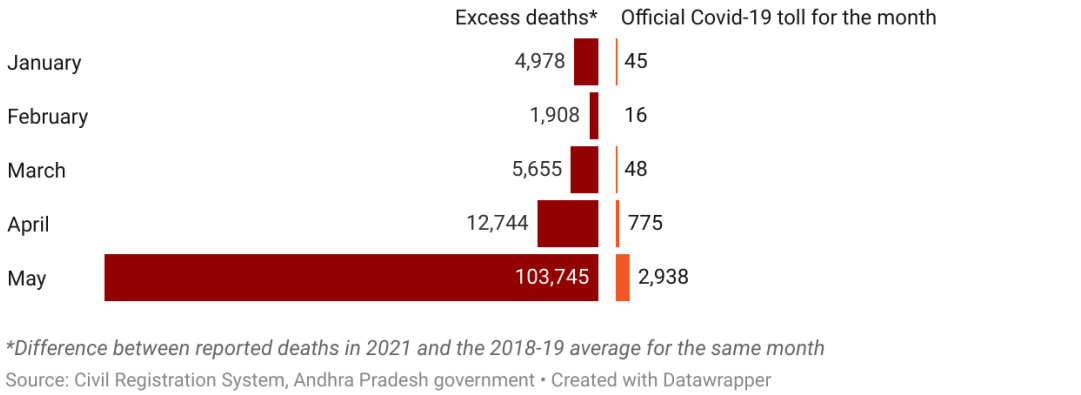






2. Madhya Pradesh: mismatch over 40 times





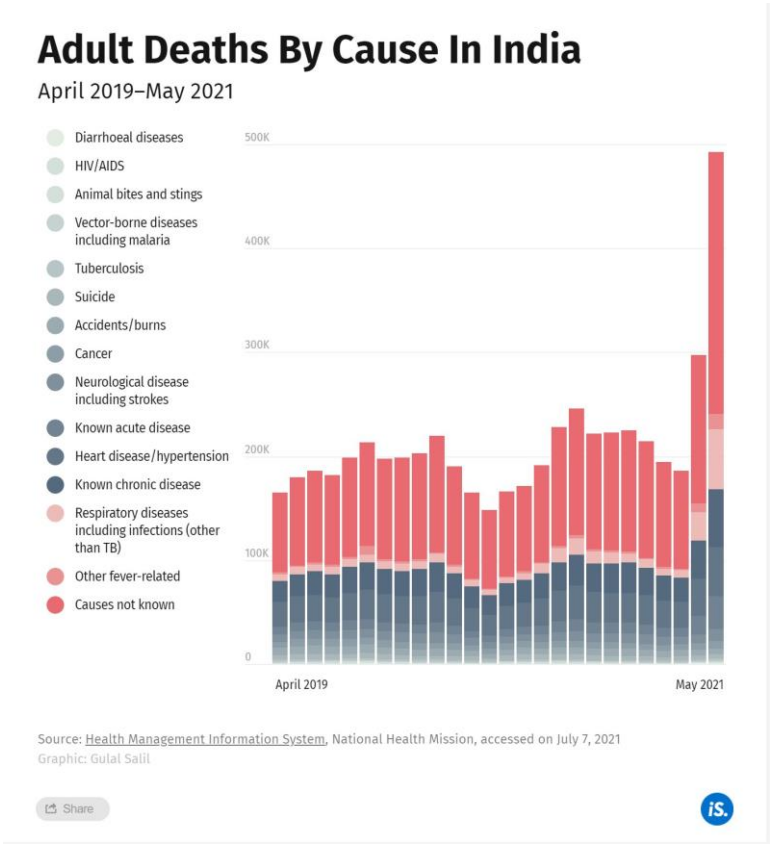
3. Andhra Pradesh: mismatch over 30 times

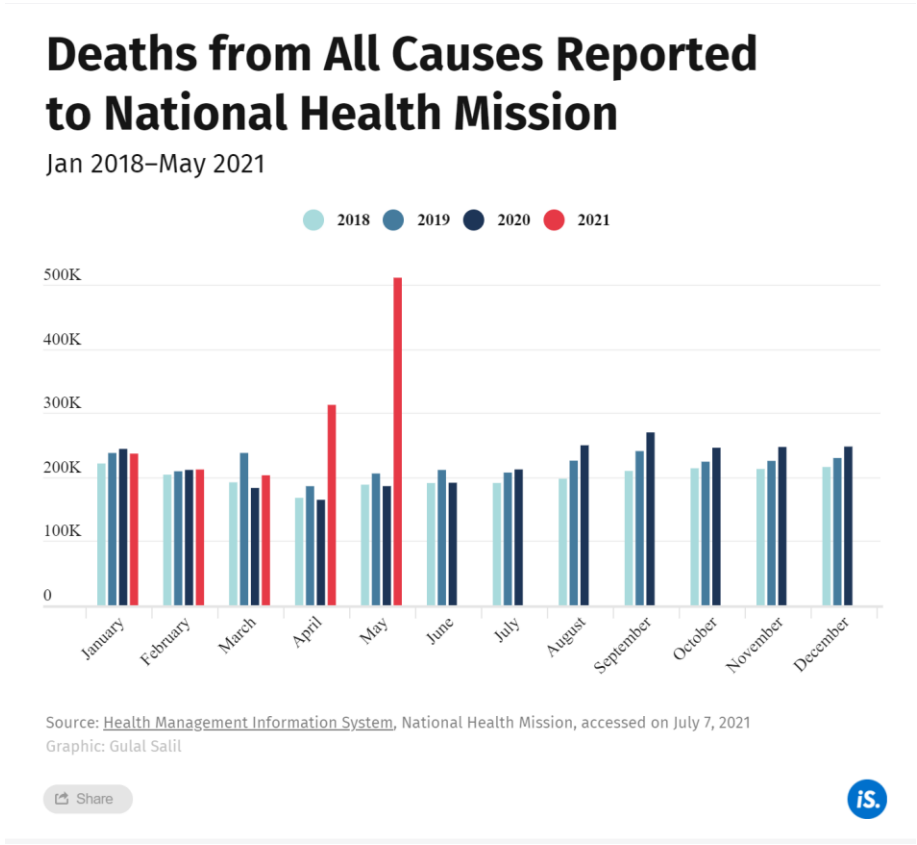
The Hindu's estimates for select states

State	Excess deaths[1]	Excess deaths[2]	Excess deaths[3]	COVID19 deaths	Multiple[1]	Multiple[2]	Multiple[3]
Punjab	51316	47571	41004	14450	3.6	3.3	2.8
West Bengal@	120227	NA	NA	10787	11.10	NA	NA
Himachal Pradesh&&	6081	NA	NA	3127	1.90	NA	NA
Haryana&	60397	NA	NA	8303	7.27	NA	NA
Tamil Nadu**	154965	151408	140172	35087	4.42	4.32	3.99
Tamil Nadu^	154965	151408	140172	24232	6.4	6.2	5.8
Karnataka	125732	167788	58620	29090	4.32	5.77	2.02
Kerala*	4178	13868	-9351	9954	0.42	1.4	-0.94
Andhra Pradesh#	195422	NA	NA	10930	17.9	NA	NA
Madhya Pradesh#	192004	NA	NA	8068	23.8	NA	NA
Total	910322	380635	230445	118941	7.65	4.90	2.96

@	Registered deaths for 2018 and 2019 for 18 districts in the State. Deaths in accessed data was ~90-94% of deaths
&&	Registered deaths for 2018 and 2019 in accessed data was ~94-96% of deaths reported in CRS 2019
&	Registered deaths for 2018 and 2019 in accessed data was ~96-97% of deaths reported in CRS 2019
[1]	Baseline mortality: Average of 2018 and 2019 figures
[2]	Baseline mortality: Average of 2015-2019 figures
[3]	Comparison with mortality projection in 2021, based on linear growth in mortality between 2015 - 2019
*	Reconciled COVID19 death toll released by State
**	Reconciled COVID19 death toll mentioned by State CRS
#	Data accessed by Scroll
^	Based on State's official COVID19 tally

Triangulating with other data sources: using the NHM





All-India estimates: #1

Abhishek Anand, Justin Sandfeur and Arvind Subramanian

- Three estimates:

1. Using CRS – 3.4 million
2. Using CPHS – 4.9 million
3. Using expected IFR – 4 million

All-India estimates: #2

Yashwant Deshmukh, Chinmay Tumbe, Prabhat Jha and others

- Two estimates:

1. Using CRS & NHM HMIS – 2.7 to 3.3 mn
2. Using Cvoter – 3.1-3.34 million

Limitations of the data

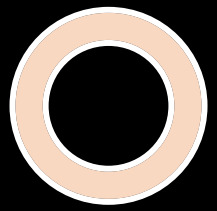
1. Registration is improving over time
2. Much unknown about baseline mortality
3. Movement of people for treatment
4. Registrations also potentially falling
5. NHM not trained at collecting death statistics + skews rural
6. Missing cause of death

Some lessons

1. Rethinking exceptionalism
2. Rethinking inter-regional comparisons
3. How do we get better data
4. How do we get people (and the government) to better trust the data?

Lessons on trust

- It is important to communicate the idea that numbers can provide personhood, validation and dignity
- Transparency of methodology and openness about limitations is key
- Building collaborative communities is key
- Can less polarised conversations foster better engagement with govt?
- Numbers can provide closure

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Thank you