

# COVID-19

## Impact Demystified

Indian Institute of Technology Mandi – 4 June 2020

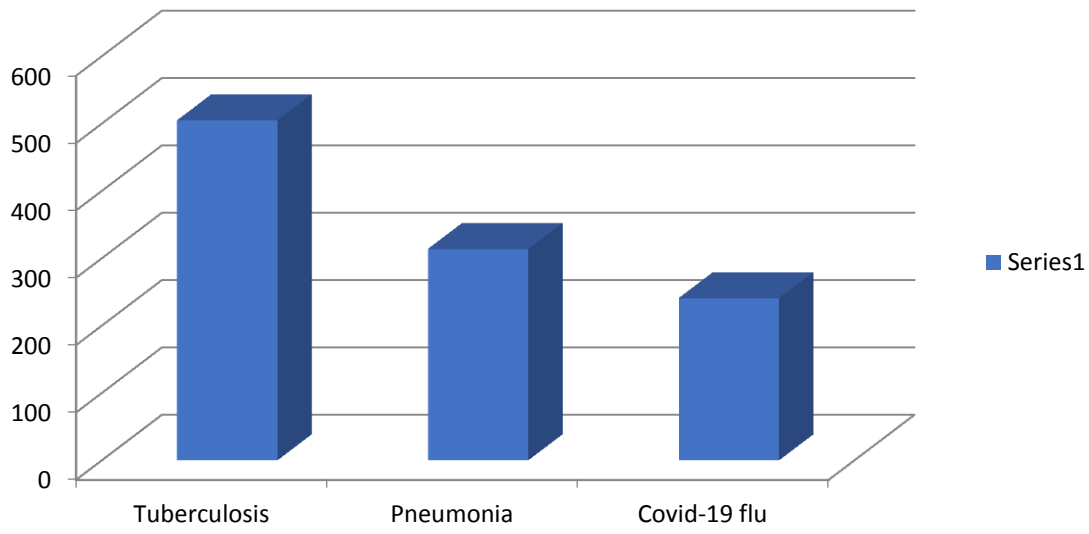
# A data-driven perspective of COVID-19

- We are constantly reminded of COVID-19 due to both our constrained circumstances and media sensationalism.
- **Healthy fear** is beneficial in reminding us to take precautions
- **Unhealthy fear** leads to a sense of depression and a feeling of helplessness that life will never be normal again
- It is important, especially for those in academia, to carry out **a scientific and data-centric assessment** of where COVID stands in the grand scheme of life
- It may be noted that while the daily death rate of COVID in India is now approx. 230, approx **25,000 people die daily in India** due to various natural and unnatural causes.

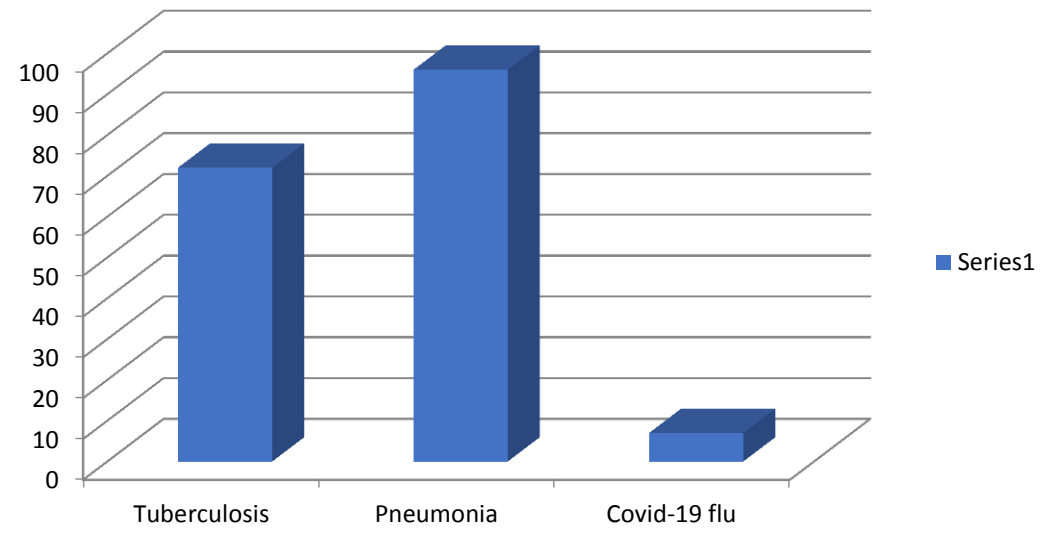
# Leading causes of death in India (2018 data)

Category	Cause of Death	Approx Deaths / Day	Age Profile
Disease (infectious and non-Infectious)	Ischemic Heart Disease	5750	< 49: 2% ; 50-69 : 19% ; 70+ :79%
	Tuberculosis	4100	< 15: 11% ; >15: 89%
	Stroke	3800	< 45: 16% ; 46-65 years: 50% ; 65+: 34%
	Seasonal Flu	1000	
	Pneumonia	350	0-5: 34% ; 5-49 : 11% ; 50-69: 18%, 70 + :37%
Accidents	Road accidents	415	0-18: 6%; 18-35: 48 % ; 35-45: 22%; 45-60: 15; >60: 6% ; age not known: 3%
	Motor-cycle accidents	130	
Premeditated	Suicide	370	0-18: 6% ; 18-30: 35% ; 30-45: 32% ; 45-60: 18%; >60: 9%
	<b>COVID-19</b>	<b>~ 230</b> (May28-June4, 2020)	0-45:14% , 45-60: 10%, 60-75: 33% , > 75: 42%

# COVID v.s. other respiratory diseases in India

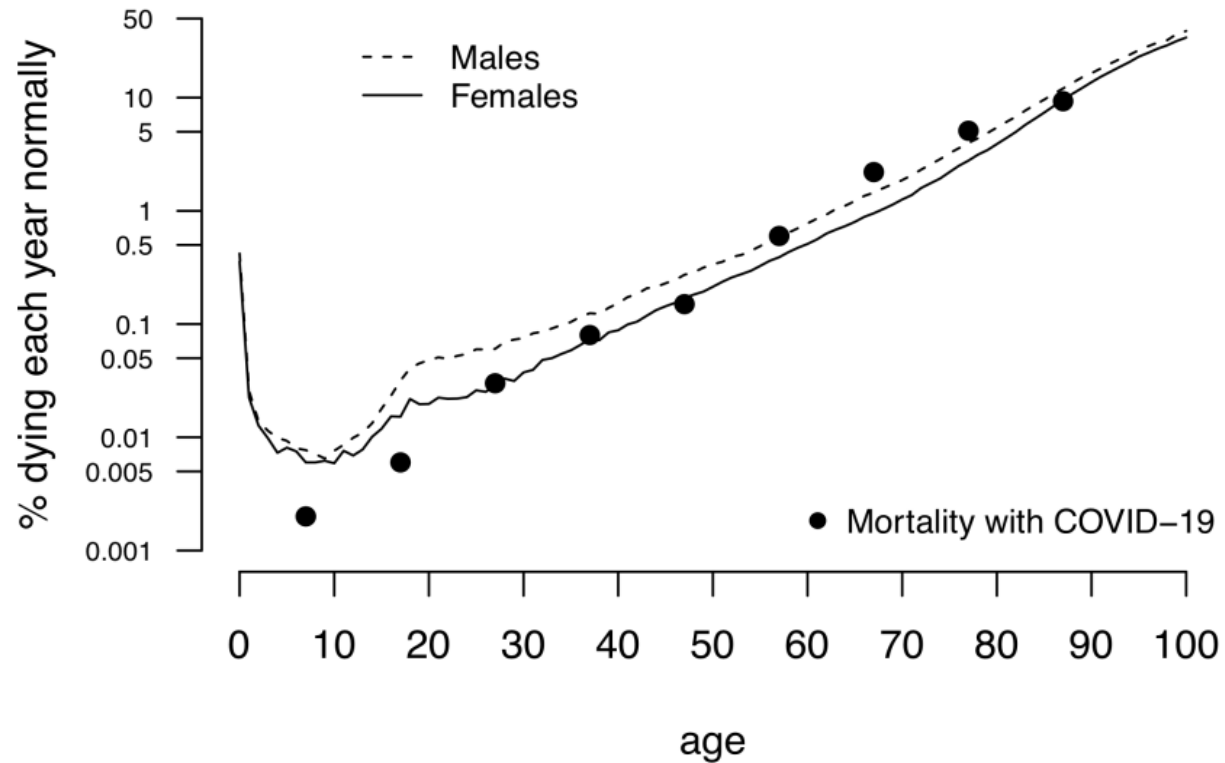


Prevalence of communicable diseases in India per 1 lakh (as per latest records)



Mortality rate of communicable diseases in India per 10 million (as per latest records)

# COVID v.s. natural causes: age-wise distribution



UK Data

**Comorbidity:** From the pooled data of available Chinese studies (2209 patients) on comorbidity:

- **hypertension 21%,**
- **diabetes 11%,**
- **cardiovascular disease (CVD) 7%**

# Current trends (as of 16 June 2020)

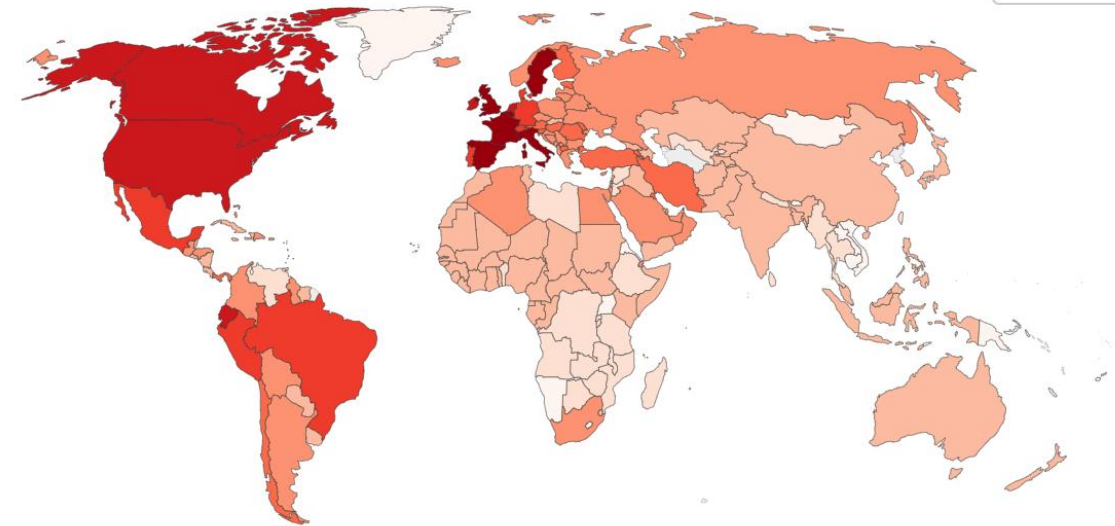
Region	No. of COVID cases/lakh	No. of COVID deaths/lakh
India	17	0.50
Himachal Pradesh	5	0.08
Delhi	119	3.00
Maharashtra	61	2.10
Gujarat	27	1.60
Punjab	8	0.16
Kerala	4	0.05
USA	575	33.00
Germany	220	10.00

Total confirmed COVID-19 deaths per million people, Jun 7, 2020

Limited testing and challenges in the attribution of the cause of death means that the number of confirmed deaths may not be an accurate count of the true total number of deaths from COVID-19.

Our World in Data

World



Source: European CDC - Situation Update Worldwide - Last updated 7th June, 11:00 (London time)

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<https://www.covid19india.org>

<https://virusncov.com/>