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Comissão Parlamentar de Inquérito

Ações e omissões do Governo Federal no enfrentamento da Pandemia da Covid-19 no Brasil

Depoente: Pedro C Hallal – Universidade Federal de Pelotas

Apresentação do depoente

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- <http://lattes.cnpq.br/3211152266266081>
- Graduação em Educação Física
- Mestrado e Doutorado em Epidemiologia
- Professor da Universidade Federal de Pelotas
- Coordenador do EPICOVID19



Os 7 pecados capitais



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Demora na compra
e desestímulo à
vacinação

Pouca testagem,
rastreamento de
contatos e isolamento

Falta de uma
comunicação
unificada

Promoção de
tratamentos
ineficazes

Uso de uma
abordagem clínica
vs. epidemiológica

Ausência de
liderança do MS e de
um comitê de crise

Desestímulo ao uso
de máscaras

Questões metodológicas



- Por que usar mortes ao invés de casos?
- Por que usar mortalidade ao invés de letalidade?
- Por que usar números relativos ao invés de números absolutos?
- Importância de usar fontes confiáveis (ourworldindata.org)

Comparações - mortalidade



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O Brasil tem



2,7%

da população mundial



e

12,9%

das mortes por
covid-19 no mundo



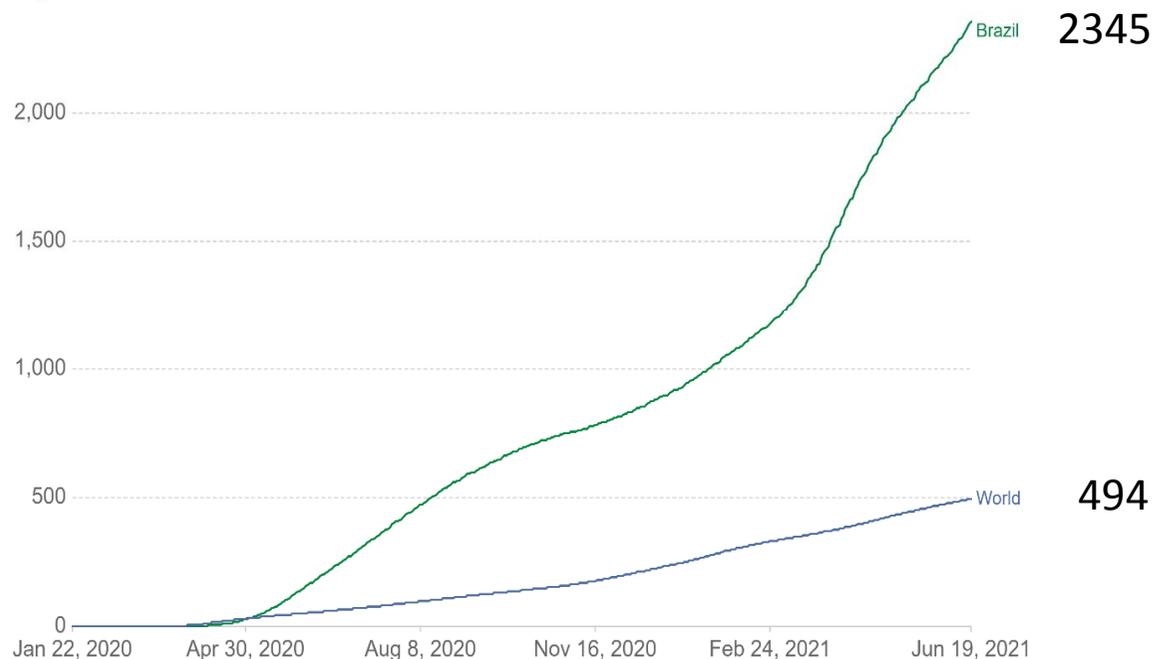
4 de cada 5 mortes no
Brasil “em excesso”,
considerando o
tamanho de nossa
população

Comparações - mortalidade



Cumulative confirmed COVID-19 deaths per million people

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 number of deaths from COVID-19.



Source: Johns Hopkins University CSSE COVID-19 Data

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4 de cada 5 mortes teriam sido evitadas se estivéssemos na média mundial

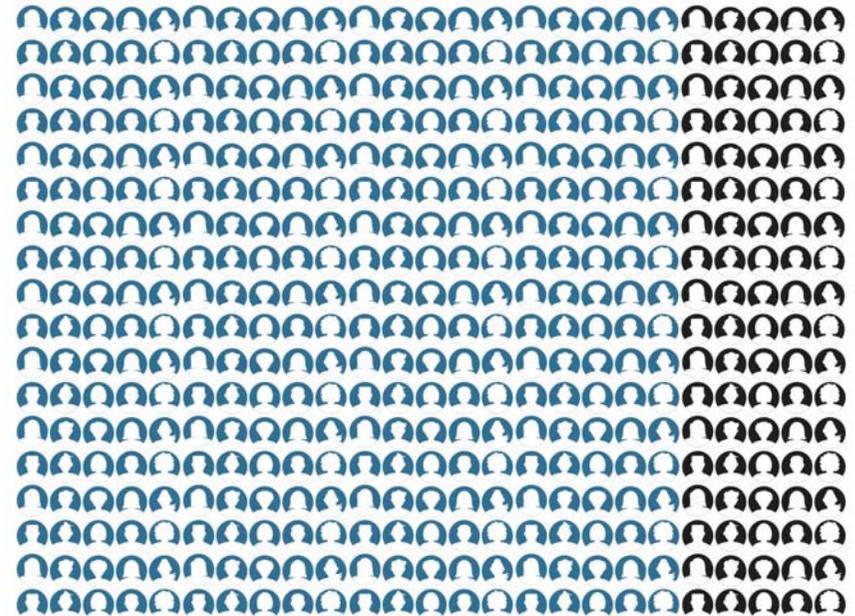
* Sem diferença após ajuste pela estrutura etária



O Brasil tem
500.000 mortes



400.000 mortes
poderiam ter sido **EVITADAS**



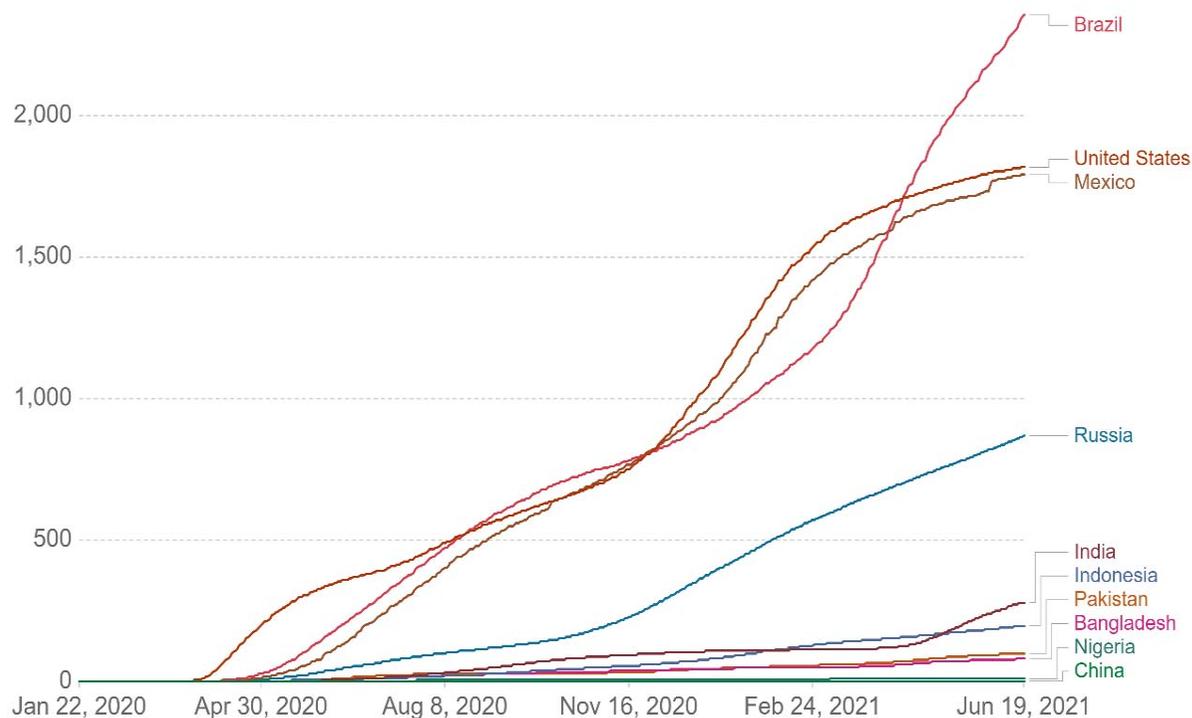
Comparações - mortalidade



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Our World
in Data



Source: Johns Hopkins University CSSE COVID-19 Data

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Comparação
injusta?

O Brasil é muito
populoso

Comparações - mortalidade



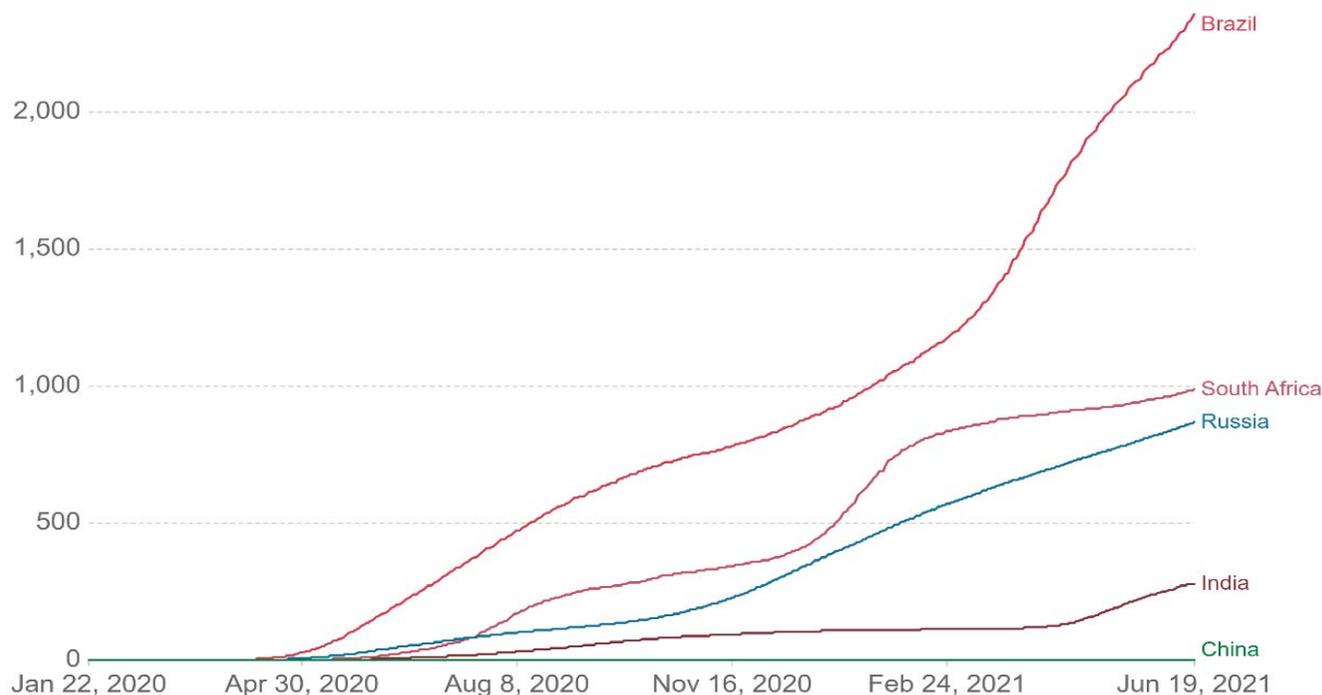
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Our World
in Data



Source: Johns Hopkins University CSSE COVID-19 Data

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Comparação
injusta?

Países +
desenvolvidos

Comparações - mortalidade



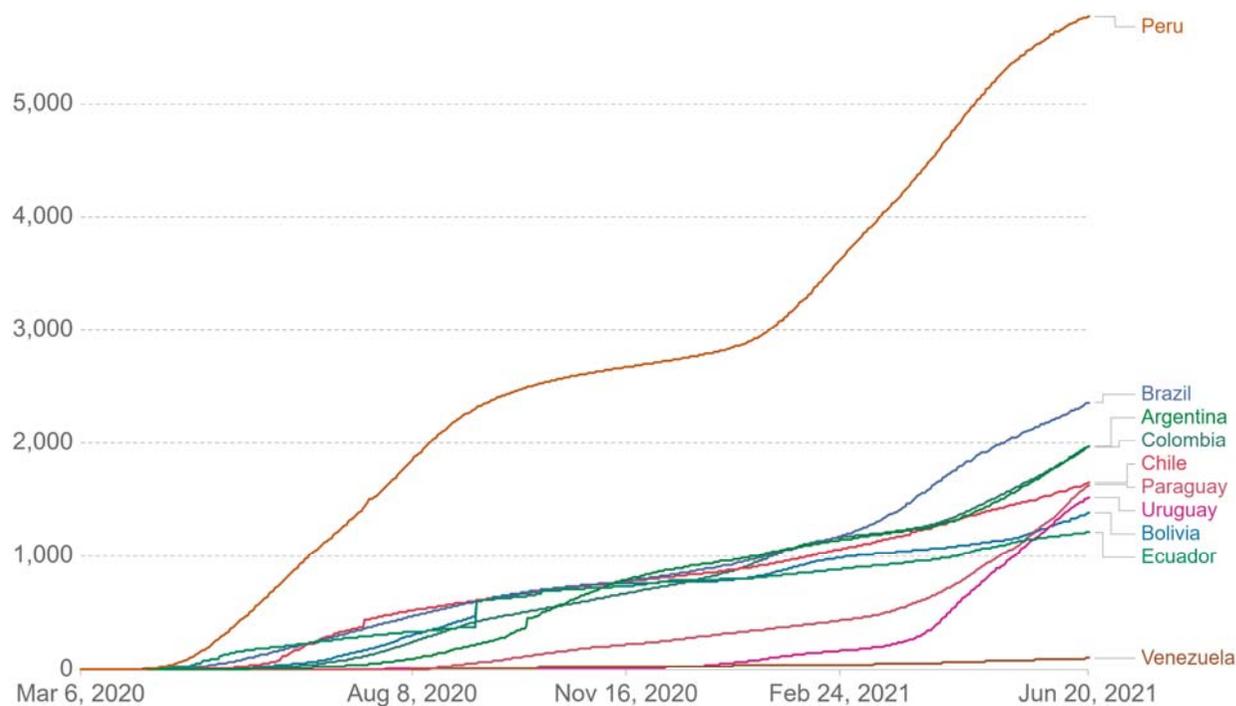
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Our World
in Data



Source: Johns Hopkins University CSSE COVID-19 Data

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Comparação
injusta?

Diferentes regiões

A divisão em ondas

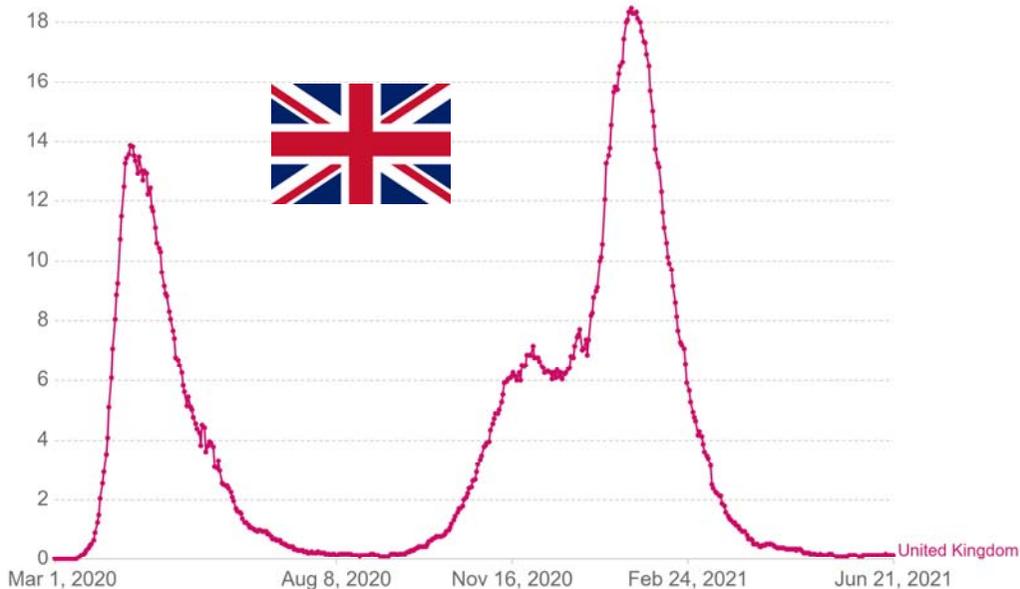


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Daily new confirmed COVID-19 deaths per million people

Shown is the rolling 7-day average. 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 number of deaths from COVID-19.



Source: Johns Hopkins University CSSE COVID-19 Data

Our World
in Data

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Source: Johns Hopkins University CSSE COVID-19 Data

Our World
in Data

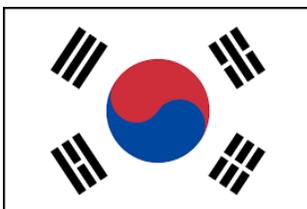
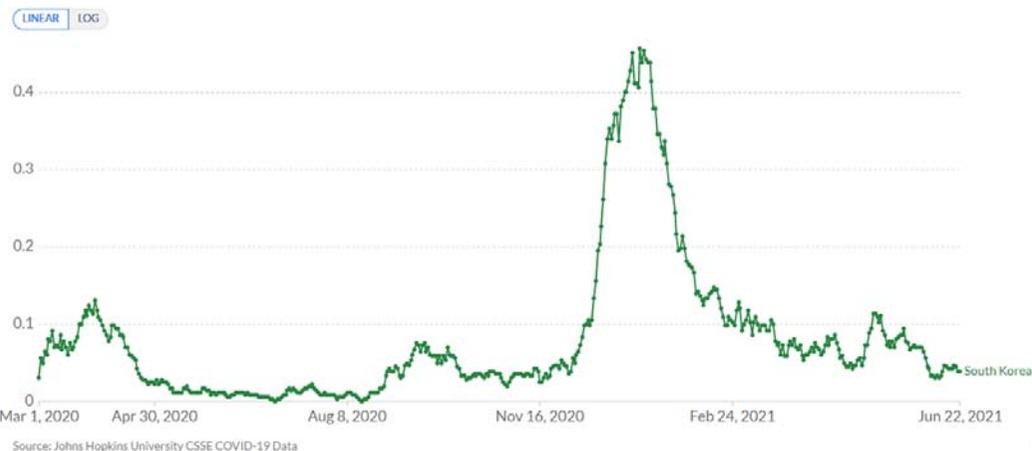
CC BY

Mas cuidado!!!



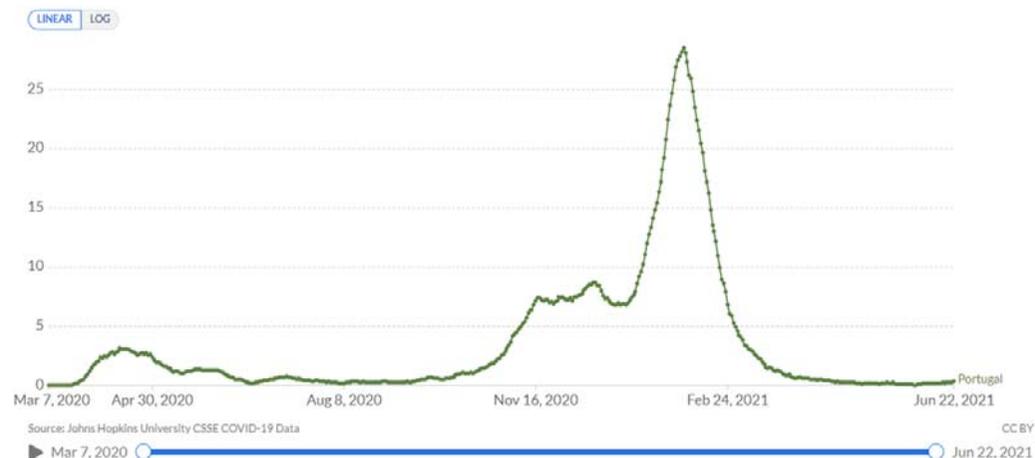
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Daily new confirmed COVID-19 deaths per million people

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EPICOVID19



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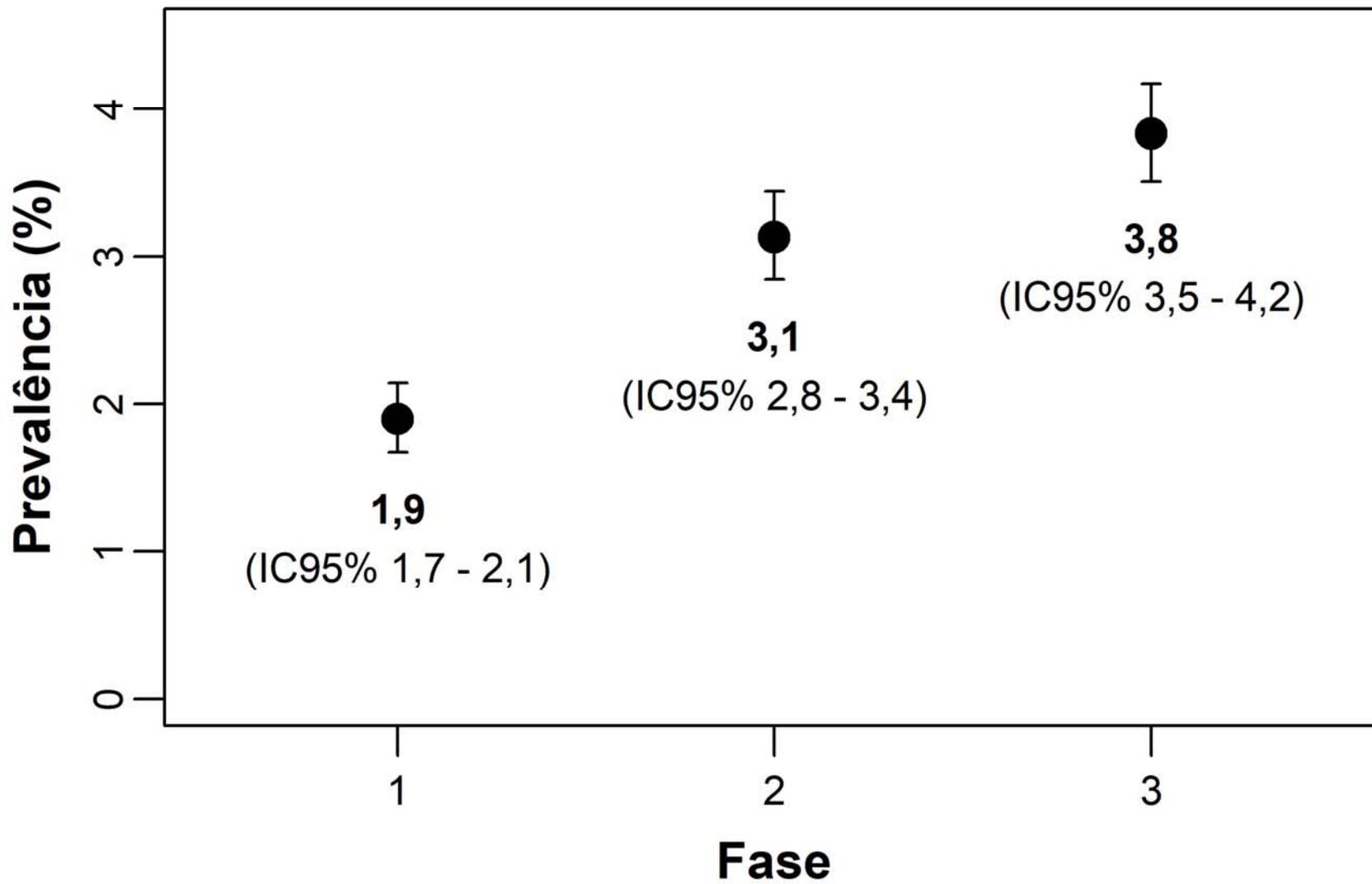
133 cidades

Três fases

- 14-21 de maio
- 04-07 de junho
- 21-24 de junho

Financiamento

- Ministério da Saúde
- R\$ 12 milhões





Fase 1

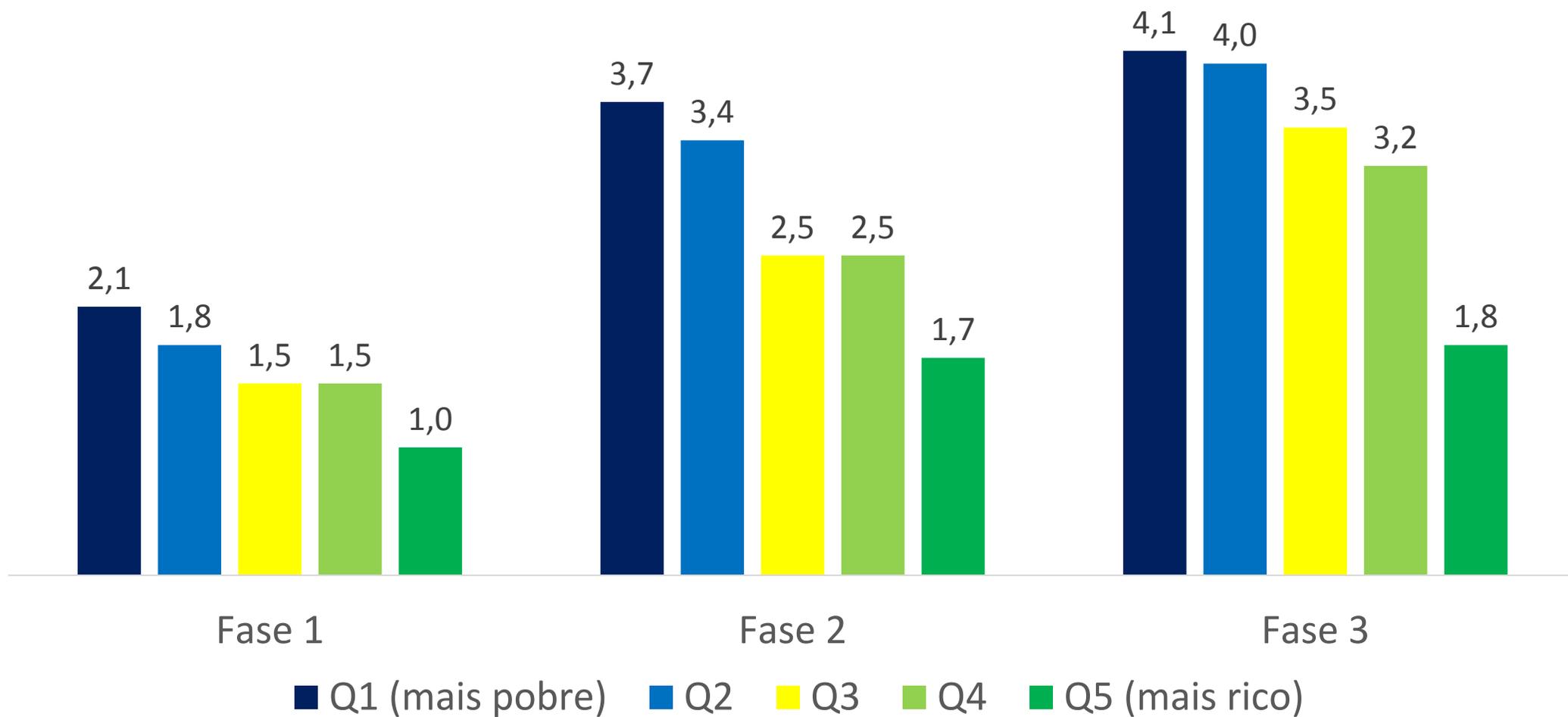


Fase 2

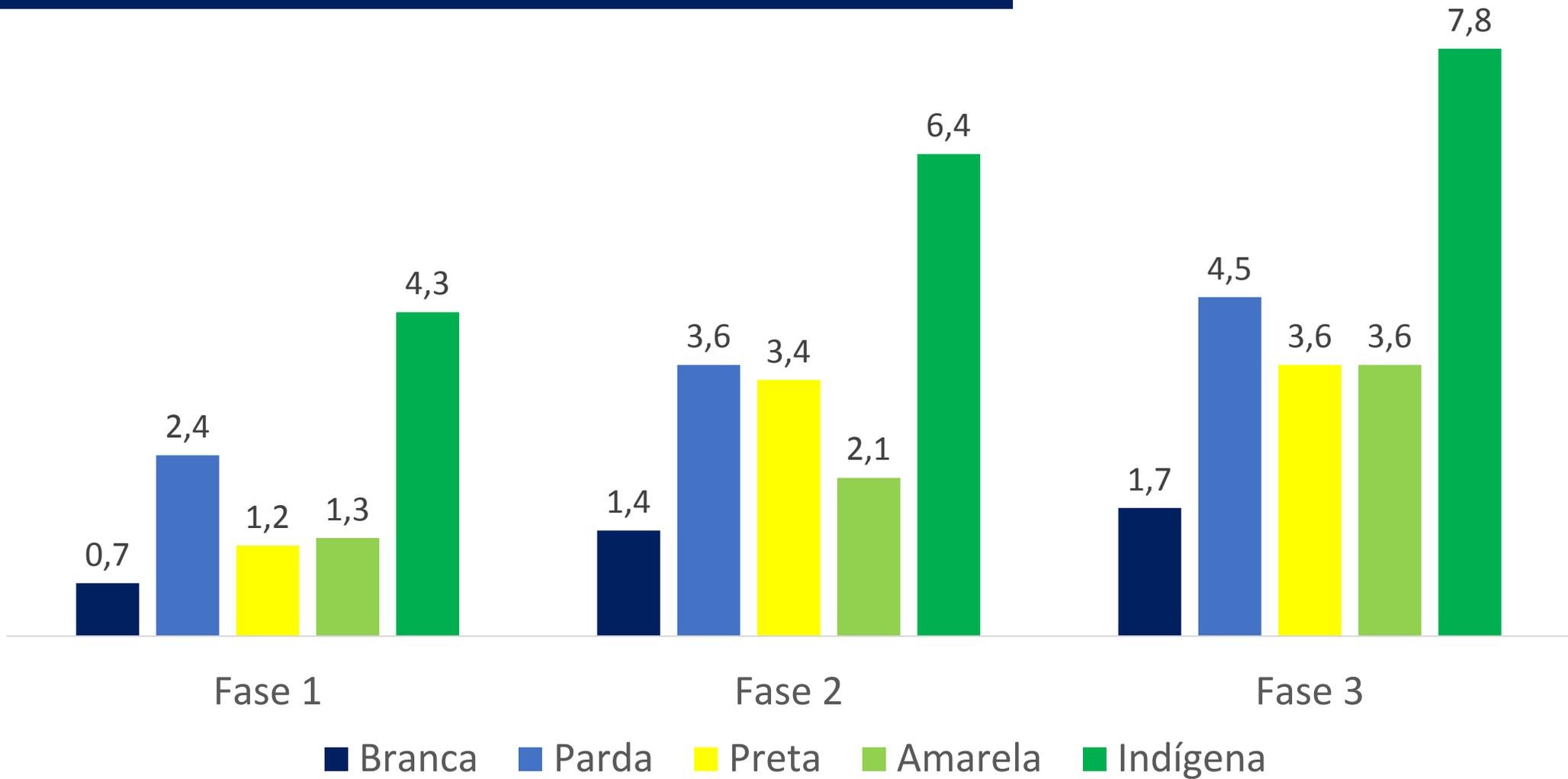


Fase 3

Covid-19 por nível socioeconômico



Covid-19 por cor da pele / etnia



Censura e interrupção



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- Slide anterior foi censurado da coletiva de imprensa
- MS decidiu interromper o monitoramento, sem razão técnica

Articles

Serological evidence of human infection with SARS-CoV-2:
a systematic review and meta-analysis



Xinhua Chen, Zhiyuan Chen*, Andrew S Azman*, Xiaowei Deng, Ruijia Sun, Zeyao Zhao, Nan Zheng, Xinghui Chen, Wanying Lu, Tingyu Zhuang,
Juan Yang, Cecile Viboud, Marco Ajelli, Daniel T Leung†, Hongjie Yut*



Comparações - vacinação



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4º número absoluto de doses aplicadas

78º no % da população com pelo menos uma dose

85º no % da população imunizada

Causalidade - Hill



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7

Section of Occupational Medicine

295

Meeting January 14 1965

President's Address

The Environment and Disease: Association or Causation?

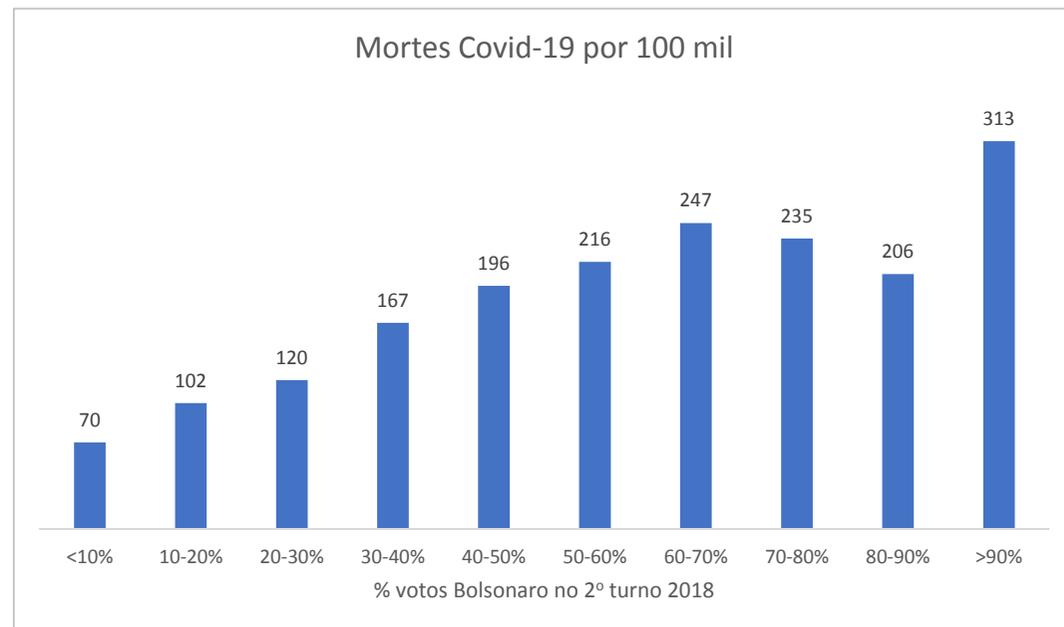
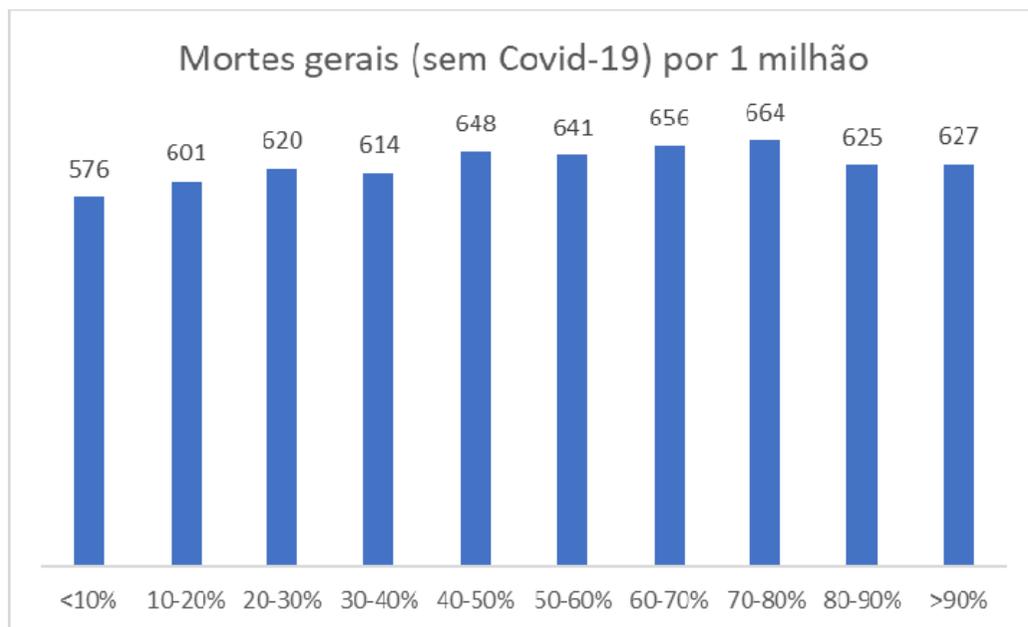
by Sir Austin Bradford Hill CBE DSC FRCP(hon) FRS
(*Professor Emeritus of Medical Statistics,
University of London*)

Amongst the objects of this newly-founded Section of Occupational Medicine are firstly 'to provide a means, not readily afforded elsewhere, whereby physicians and surgeons with a special knowledge of the relationship between sickness and injury

observed *association* to a verdict of *causation*?
Upon what basis should we proceed to do so?

I have no wish, nor the skill, to embark upon a philosophical discussion of the meaning of 'causation'. The 'cause' of illness may be immediate and direct, it may be remote and indirect underlying the observed association. But with the aims of occupational, and almost synonymously preventive, medicine in mind the decisive question is whether the frequency of the undesirable event B will be influenced by a change in the environmental feature A. *How* such a

Mortalidade geral vs. Covid-19



Impacto do atraso na compra das vacinas



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95.500 mortes (Hallal)

Pfizer e Coronavac – conforme informações na CPI

145.000 mortes (Massad et al)

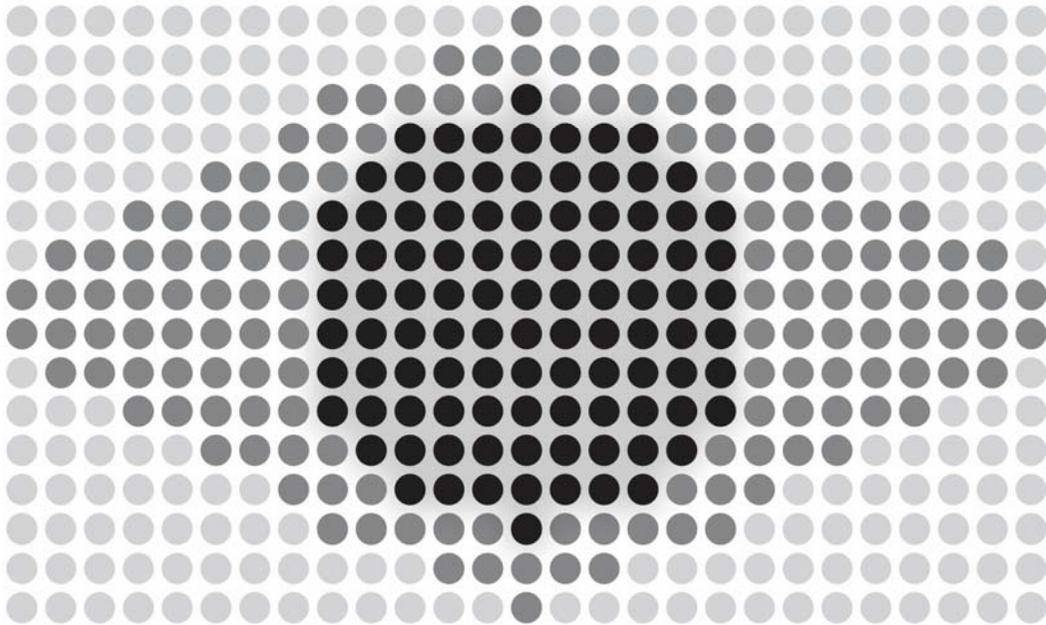
Considerações finais



- Brasil é um dos piores países do mundo na resposta à Covid-19
 - Não há outra justificativa, exceto a postura anti-ciência
- Investir na aquisição da imunidade de rebanho foi uma estratégia inicialmente equivocada, e depois repugnante
- 4 de cada 5 mortes não teriam ocorrido se estivéssemos na média mundial
 - Entre 95 e 145 mil mortes causadas pela demora em comprar as vacinas



**O Brasil tem
500.000 mortes**



**400.000 mortes
poderiam ter sido EVITADAS**

