#### Iran COVID-19 epidemic models situation report No 49 – 2022-03-18

Farshad Pourmalek MD PhD
Former lecturer, University of British Columbia, Vancouver | <u>UBC SPPH</u> | <u>ORCID</u> | <u>PubMed</u> pourmalek farshad@yahoo.com

Combine and visualize international periodically updated estimates of COVID-19 pandemic

at the country level, countries without subnational level estimates

Iran

Based on uptake 20220318 in <a href="https://github.com/pourmalek/covir2">https://github.com/pourmalek/covir2</a> Study update dates in uptake 20220318:

DELP 20220318, IHME 20220218, IMPE 20220120, SRIV 20220318

#### **Summary 20220318:**



The New Year ceremonies and travels increase number of contacts and probability of transmission and spread the virus across the country. These factors are not fully included in the models. As such, a new surge could be expected in Iran in March and April.

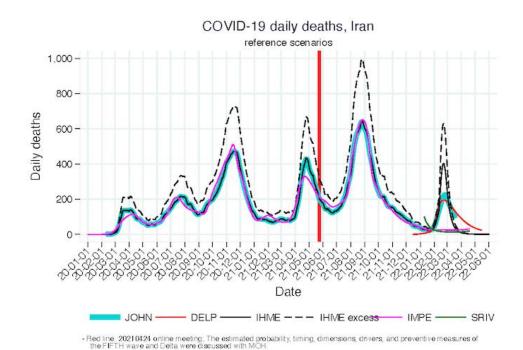
Considerable proportions of the COVID-19 cases and deaths that will occur in the new-coming 7th wave can be *prevented* by Non-Pharmaceutical Interventions (NPIs) and vaccination.

#### Names of models/studies in Farsi:

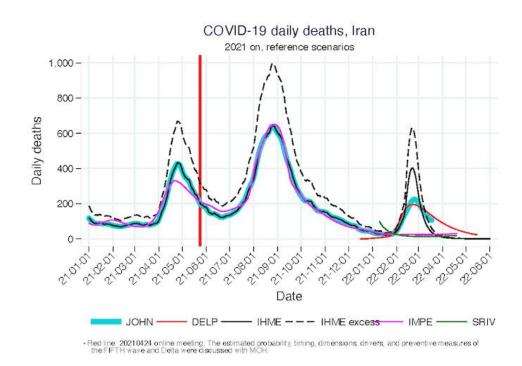
(DELP) مطالعه دلفی، انستیتوی فناوری ماساچوست کمبریج (منحنی قرمز رنگ)
(IHME) مطالعه موسسه آی اچ ام ای، دانشگاه واشنگتن سیاتل (منحنی سیاه رنگ)
(IMPE) مطالعه ایمپریال کالج لندن (منحنی صورتی رنگ)
(SRIV) مطالعه اسریواستاوا در دانشگاه کالیفرنیای جنوبی (منحنی سبز رنگ)
(JOHN) دانشگاه جانز هایکینز، انعکاس گزارش های رسمی کشور ها به سازمان جهانی بهداشت (منحنی آبی رنگ)

## **Selected graphs**

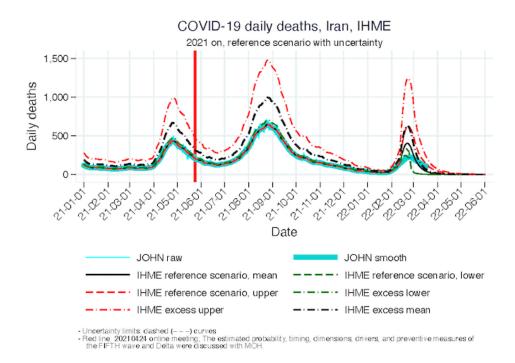
#### (1) Iran Daily deaths, all time



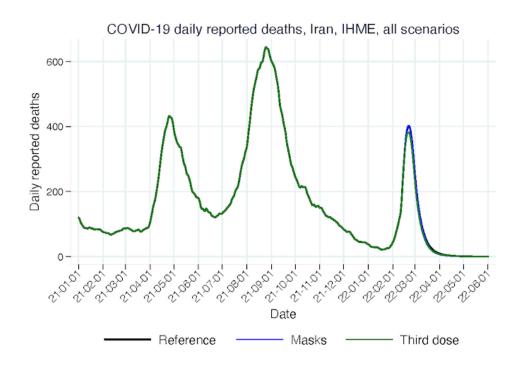
### (2) Iran Daily deaths, 2021 on



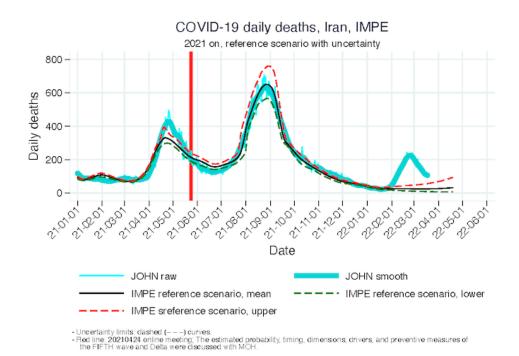
#### (3) Iran Daily deaths, 2021 on, reference scenario with uncertainty, IHME



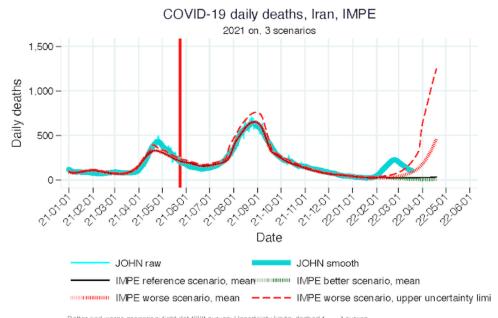
#### (4) Iran Daily deaths, 2021 on, all scenarios, IHME



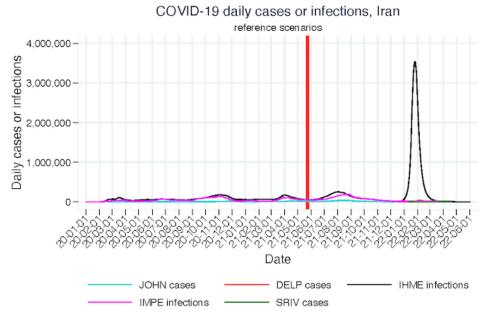
#### (5) Iran Daily deaths, 2021 on, reference scenario with uncertainty, IMPE



#### (6) Iran Daily deaths, 2021 on, 3 scenarios, IMPE

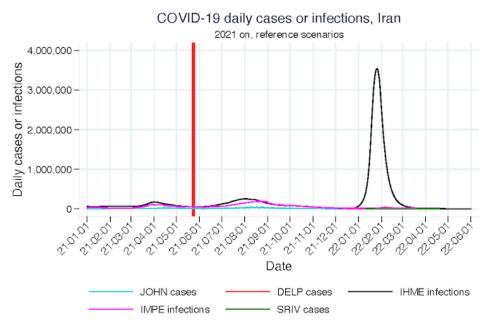


#### (7) Iran Daily cases or infections, all time

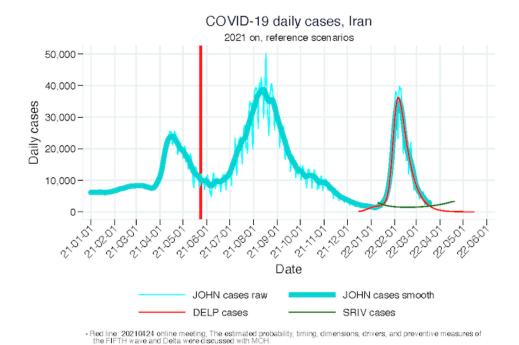


Red line: 20210124 online meeting, The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.

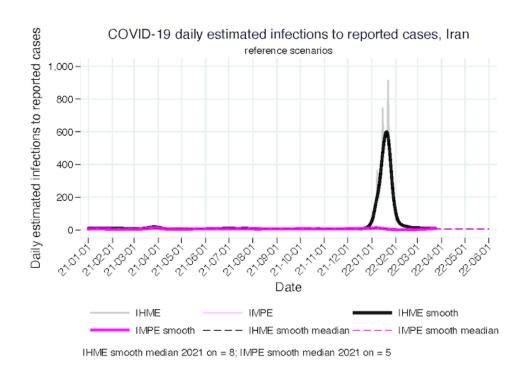
#### (8) Iran Daily cases or infections, 2021 on



#### (8b) Iran Daily cases, 2021 on

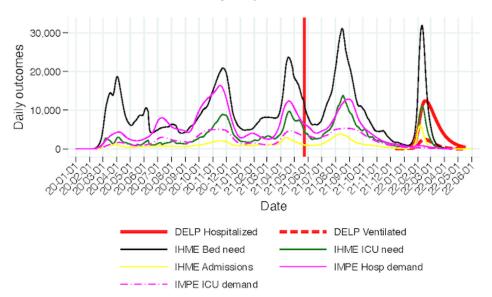


# (8c) Iran <u>Daily estimated infections IHME, IMPE to reported cases JOHN, main scenarios, 2021</u> on



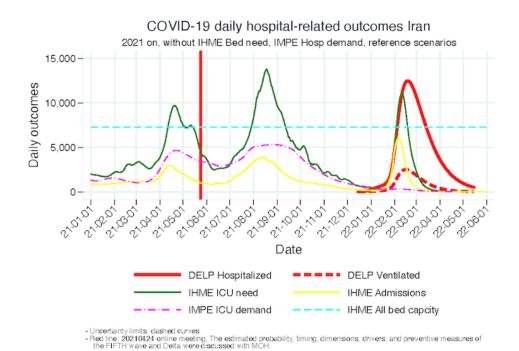
#### (9) Iran Hospital-related outcomes, all time



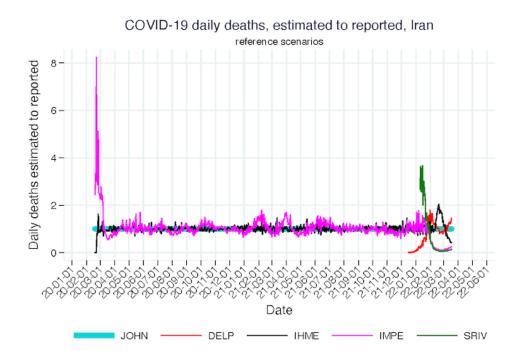


Red line: 20210424 online meeting, The estimated probability, timing, dimensions, drivers, and preventive measures of the FIFTH wave and Delta were discussed with MOH.

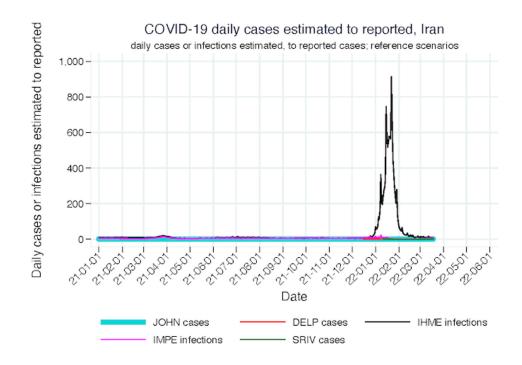
#### (10) Iran Hospital-related outcomes, 2021 on



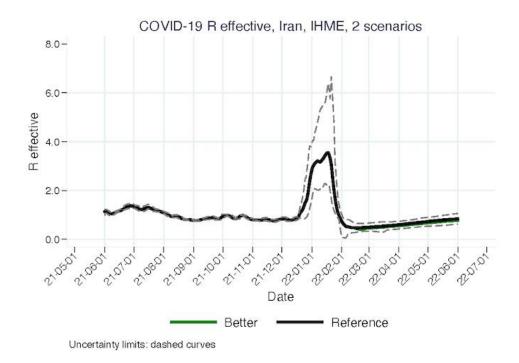
#### (11) Iran Daily deaths estimated to reported, all time



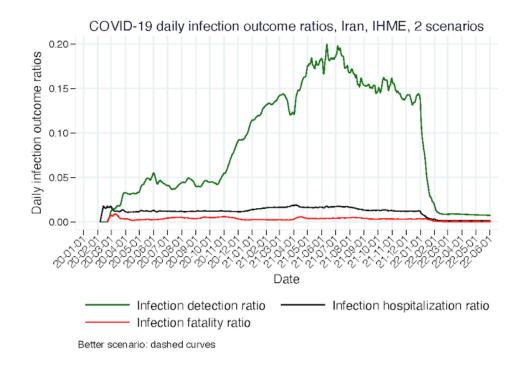
#### (12) Iran Daily cases or infections estimated to reported cases, 2021 on



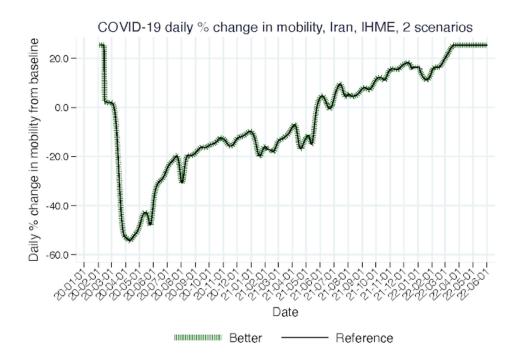
#### (13) Iran R effective, 2 scenarios, 2021 on, IHME



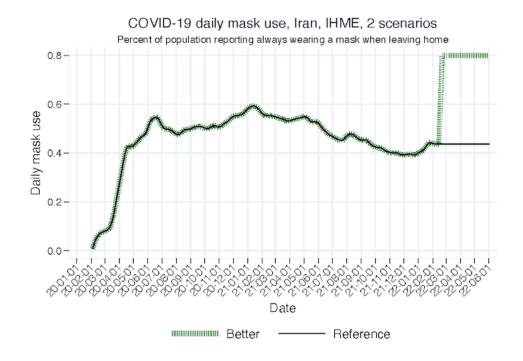
#### (14) Iran Daily Infection-outcome ratios, 2 scenarios, 2021 on, IHME



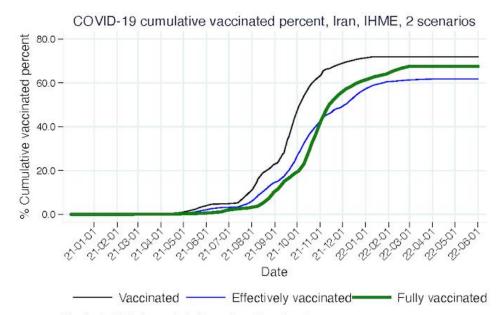
#### (15) Iran Daily mobility, 2 scenarios, all time, IHME



#### (16) Iran Daily mask use, 2 scenarios, all time, IHME



#### (17) Iran Percent cumulative vaccinated, 2021 on, IHME



Vaccinated: Initially vaccinated (one dose of two doses) Effectively vaccinated: one and two dose with efficacy Fully vaccinated: one of one and two of two doses