

WAWASAN OPEN UNIVERSITY







Jointly Present A Public Webinar in English

The Use of Traditional Chinese Medicine (TCM) & Supplements to Mitigate and Manage COVID-19

Overview of COVID-19
Infection and Timeline,
the Use of SOPs and Supplements
to Mitigate and Manage
the Spread of COVID-19

Presented by
Dato' Dr Neoh Soon Bin
Soon Soon Group of Companies

2 November 2021



# Agenda

- When is the next big wave post vaccination?
   When is the COVID-19 going to be over?
   Comparing Malaysia with other countries with high vaccination rates eg UK, Israel and Singapore.
- 2. Can SOPs, Air Treatment and Sprays & Gargles reduce risk of infection?
- 3. Are there other things we can do or take to reduce our risk of catching COVID-19?
- 4. What you need to do in case you catch COVID-19?

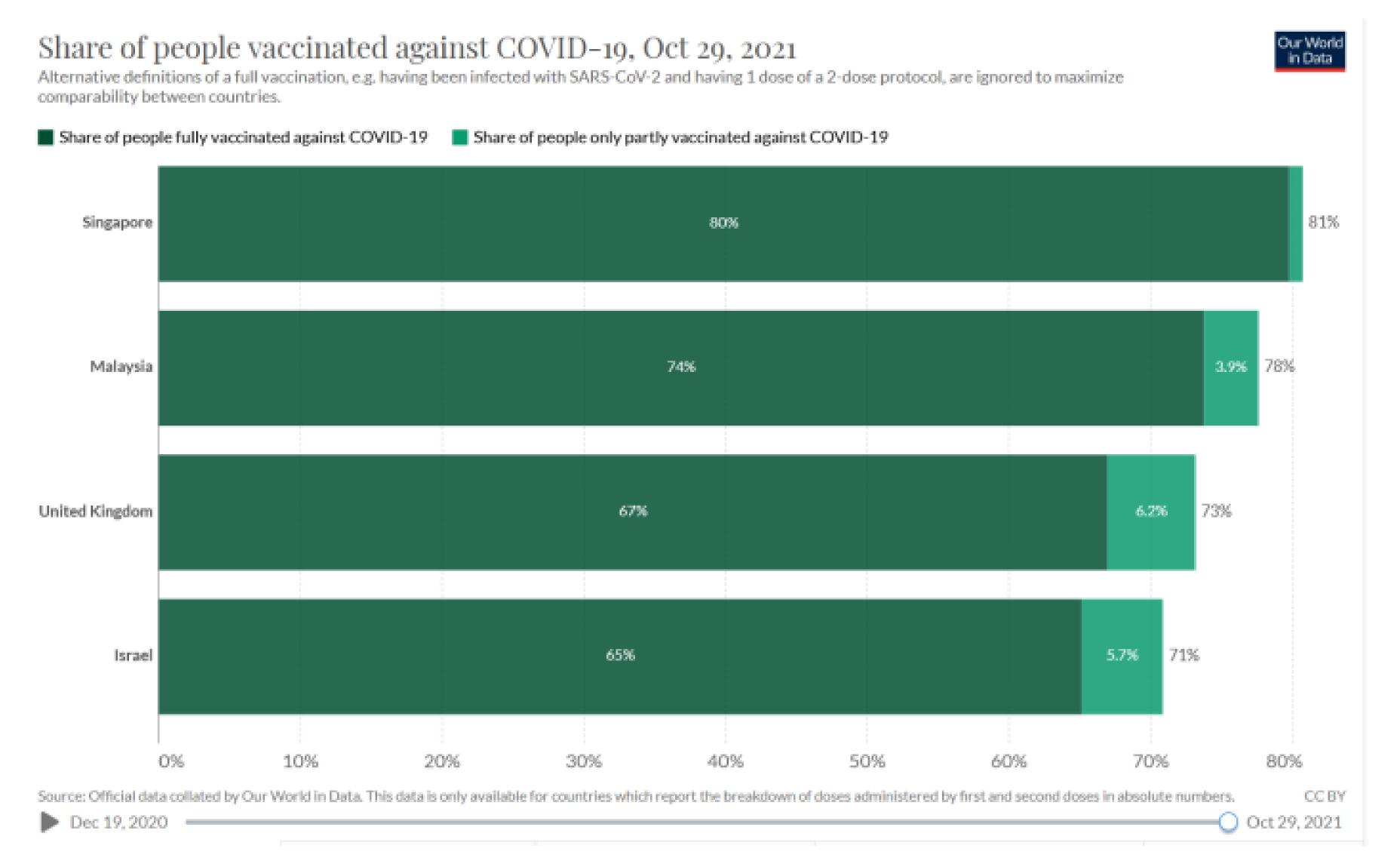
These presentation slides will be available at "Our Response to COVID-19" at <a href="http://www.soonsoongroup.com">http://www.soonsoongroup.com</a>

So Relax and Concentrate

# When is the next big wave post vaccination? When is COVID-19 going to be over?

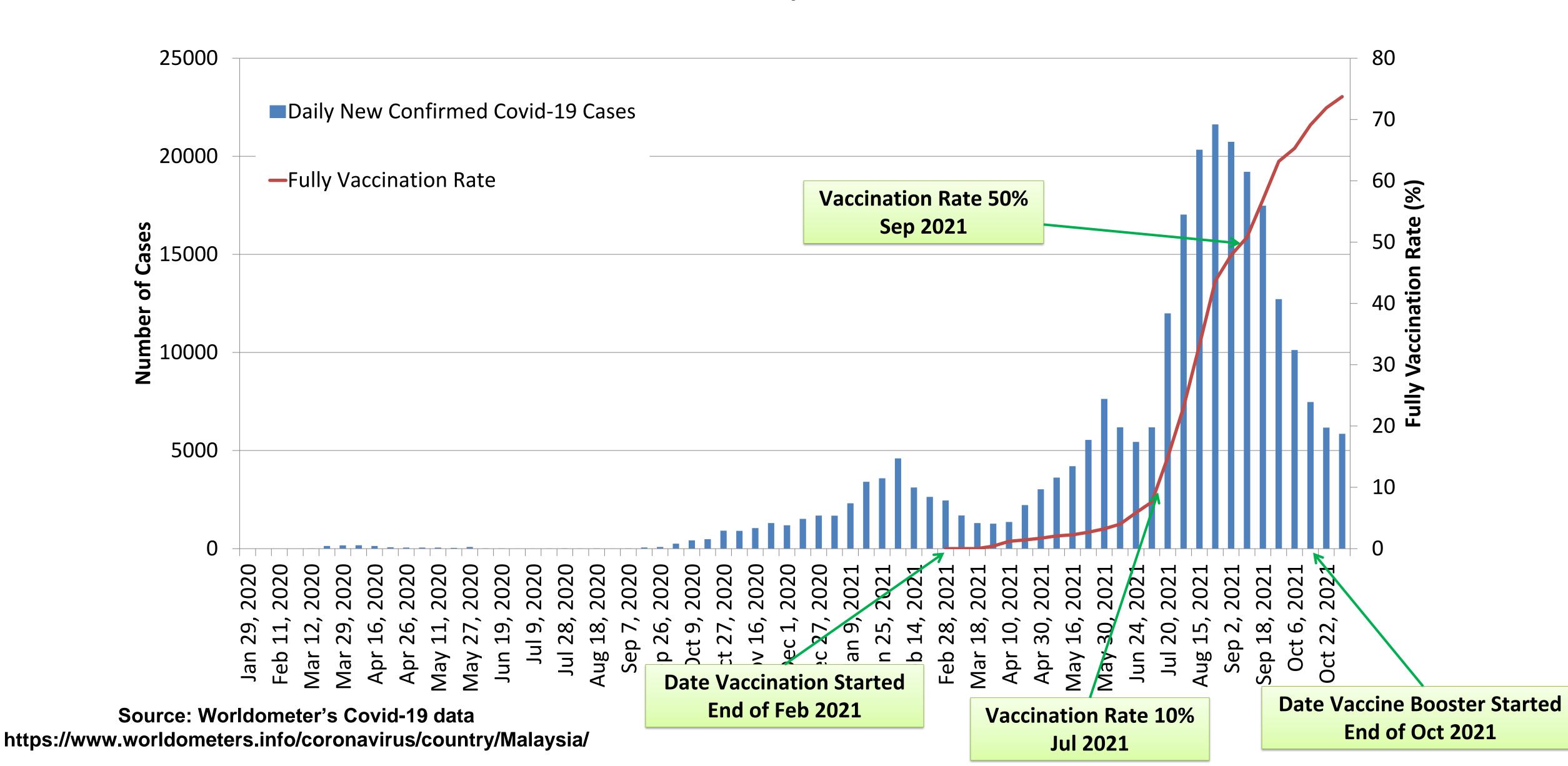
Comparing Malaysia with other countries with high vaccination rate eg UK, Israel and Singapore

# Comparing the percentage of Vaccination in Malaysia with Singapore, UK and Israel



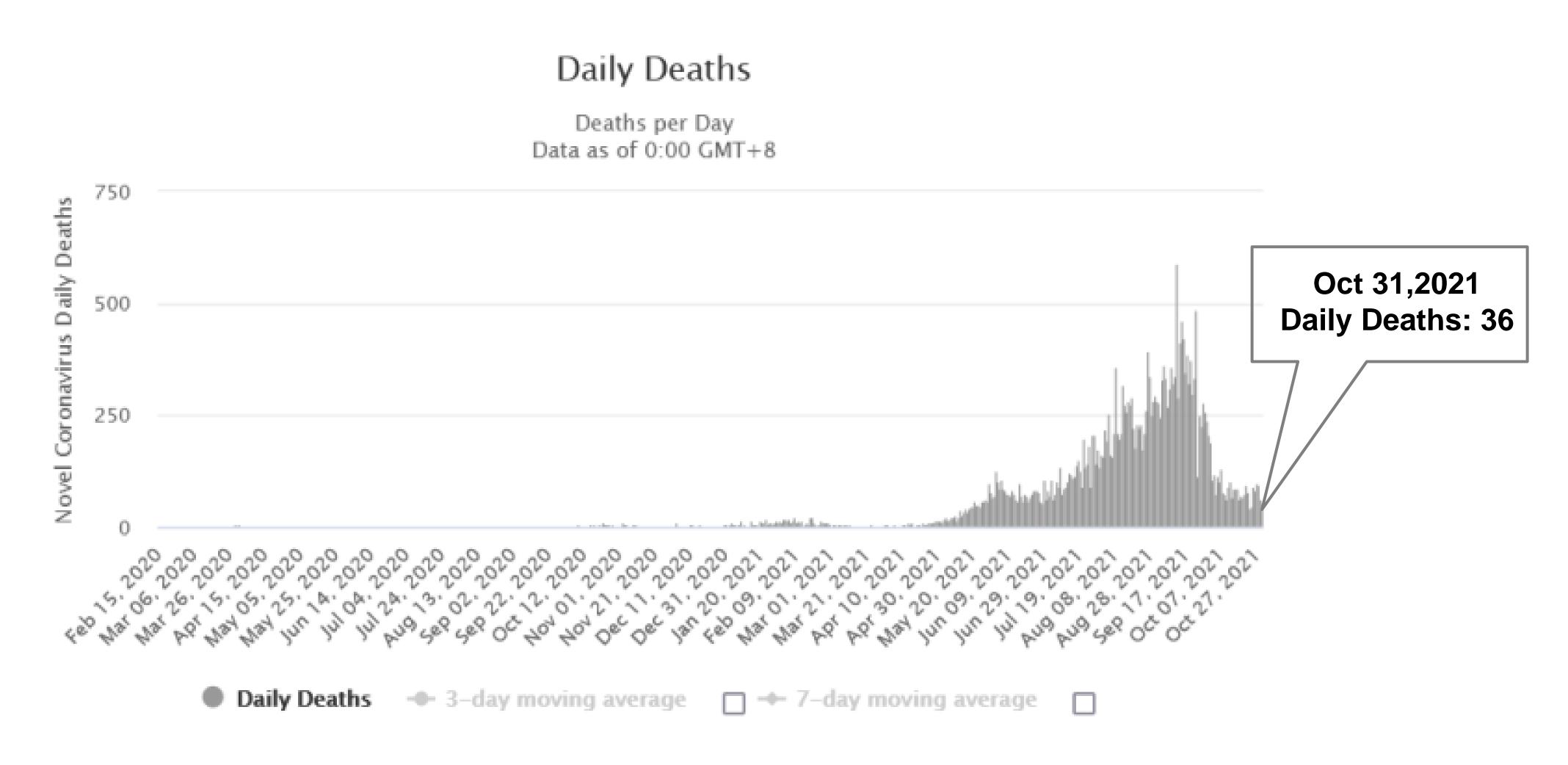
# Situation in Malaysia

#### Malaysia

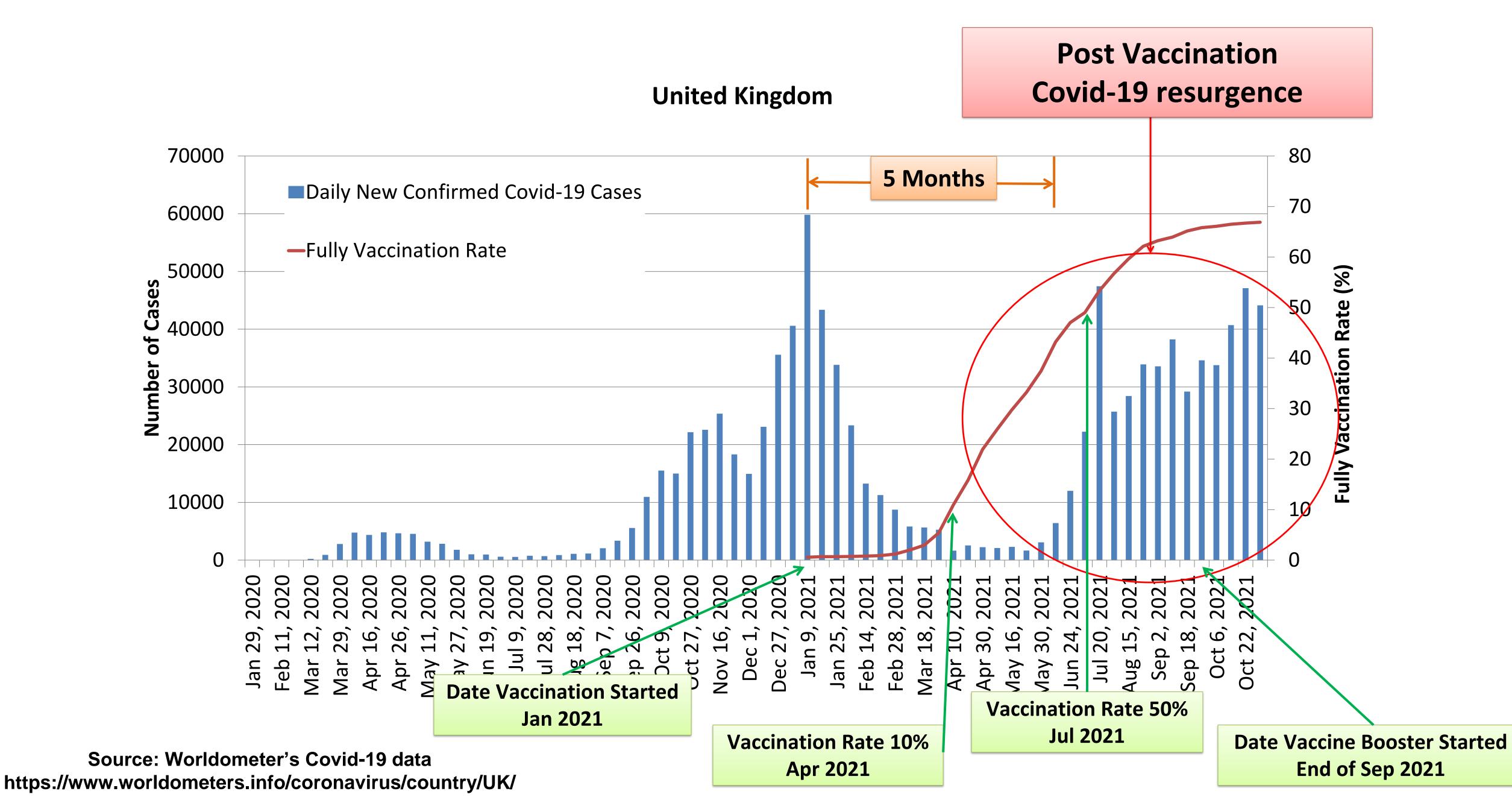


# Situation in Malaysia

### Daily New Deaths in Malaysia

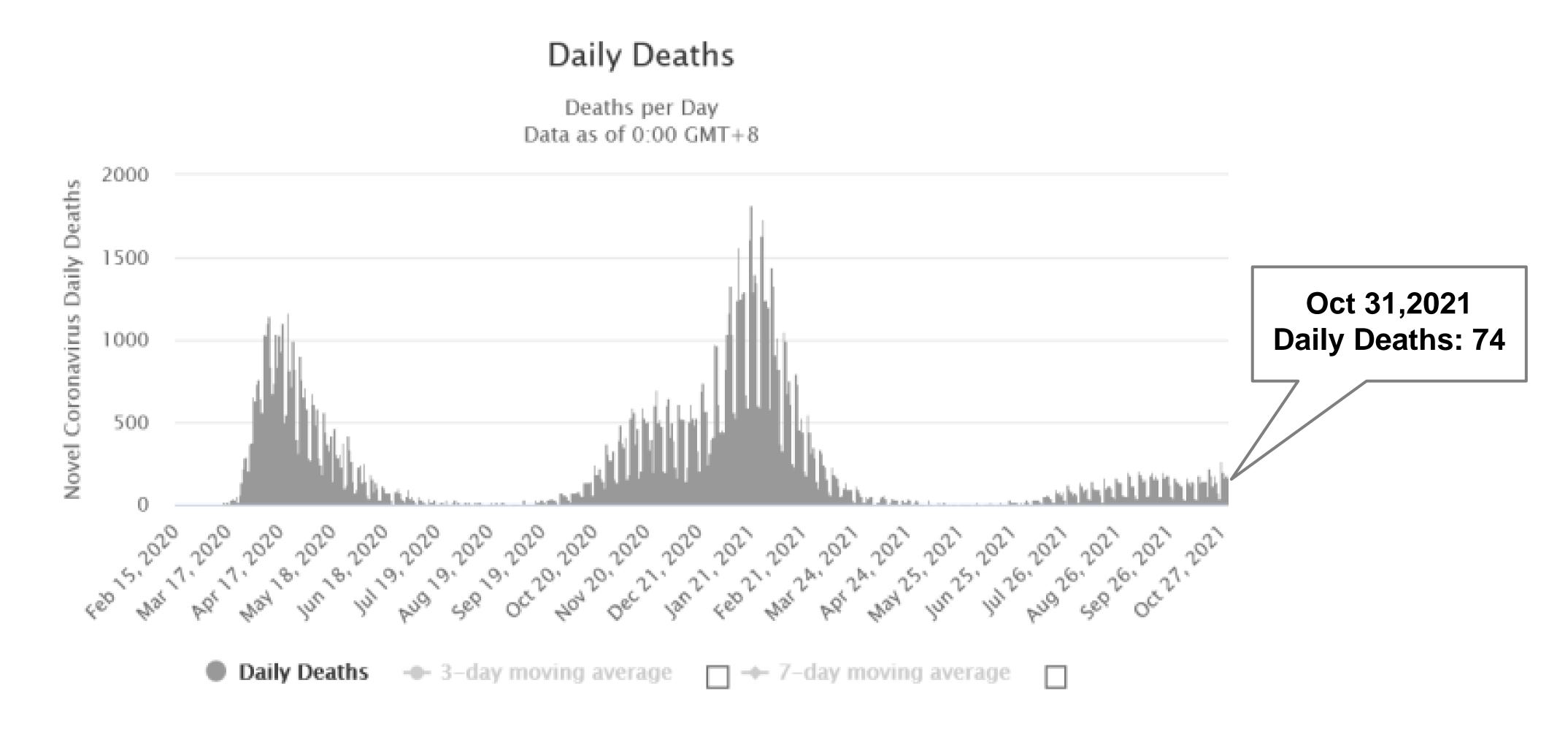


## Situation in UK

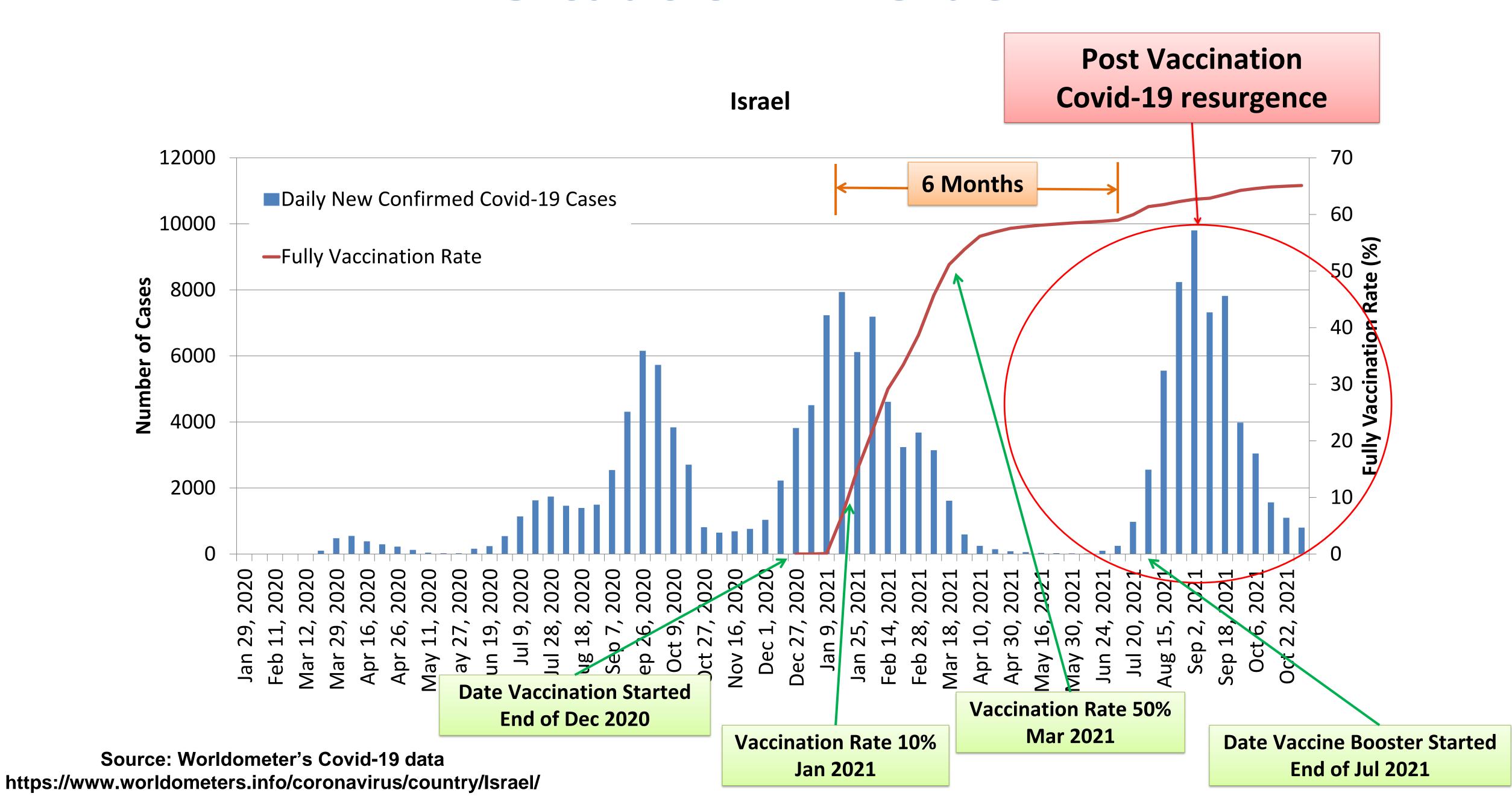


# Situation in UK

### Daily New Deaths in the United Kingdom

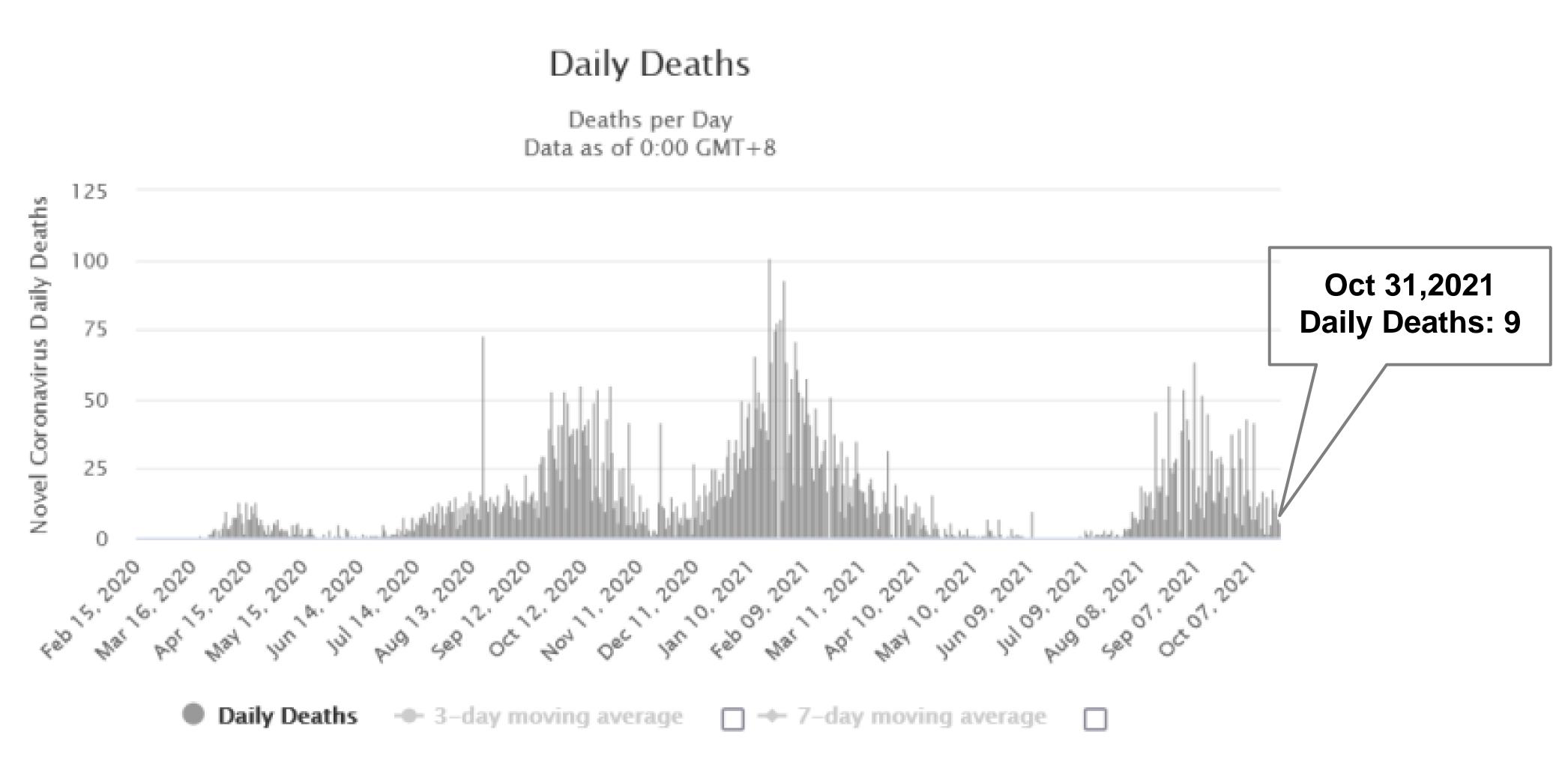


### Situation in Israel



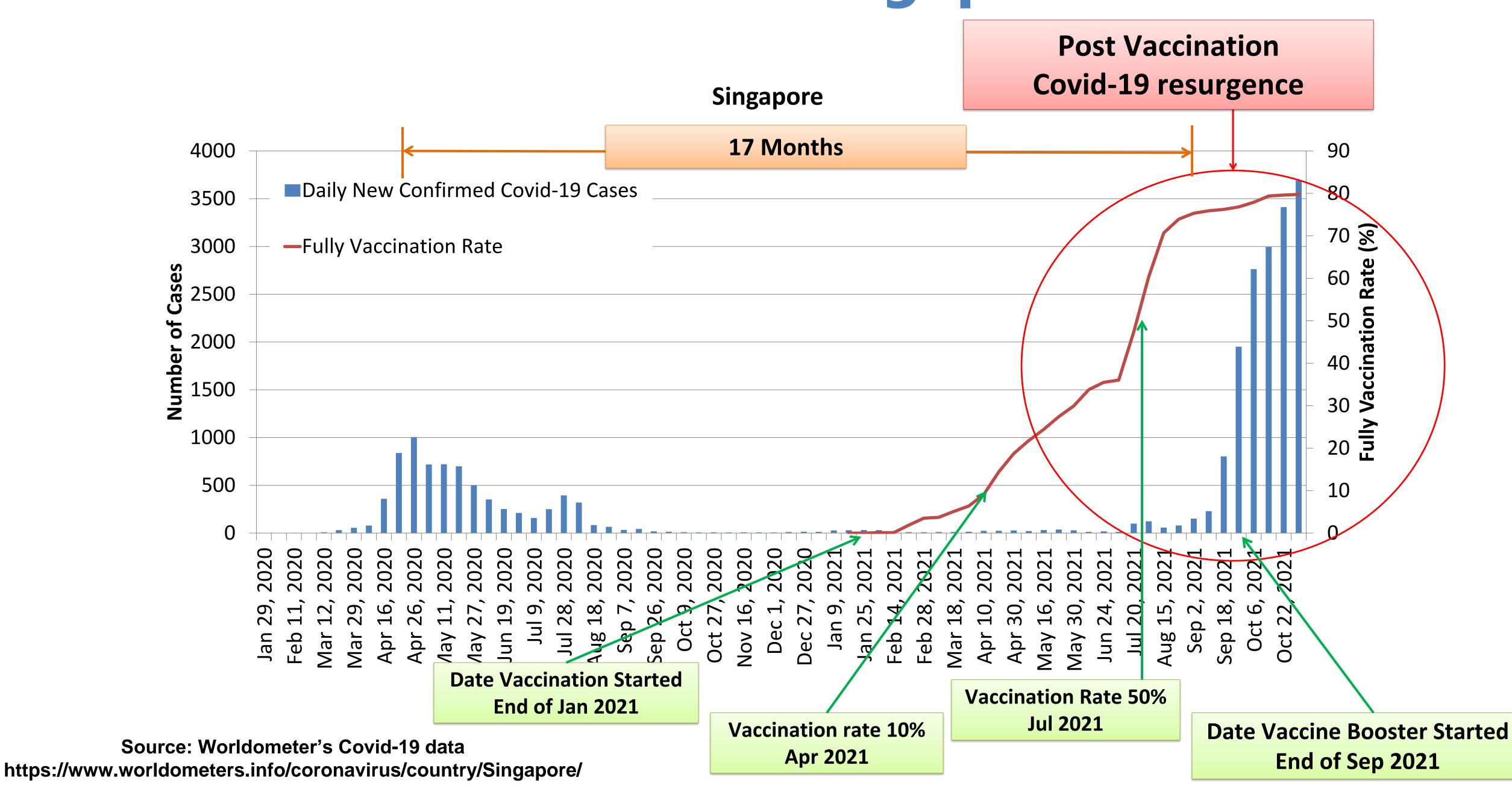
## Situation in Israel

### Daily New Deaths in Israel



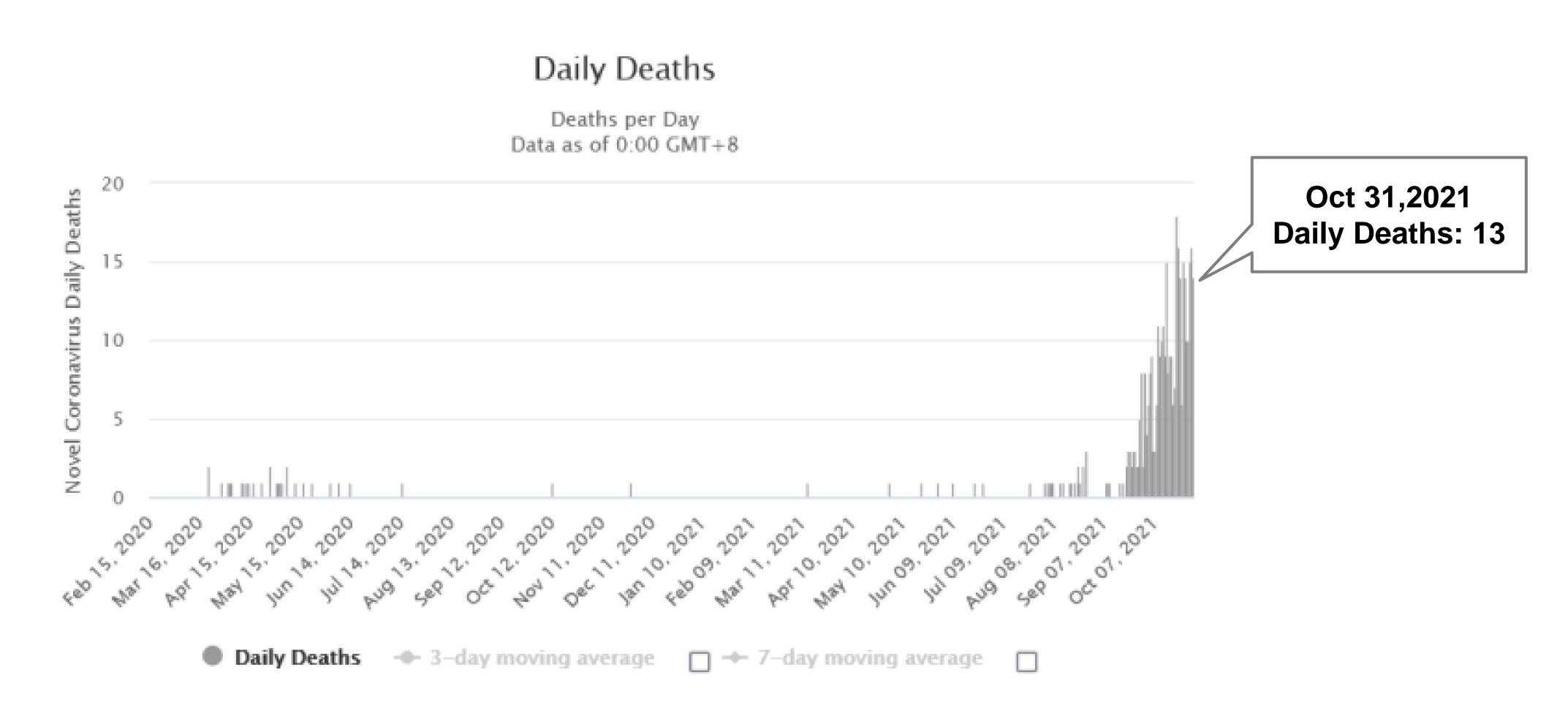
Source: Worldometer's Covid-19 data <a href="https://www.worldometers.info/coronavirus/country/lsrael/">https://www.worldometers.info/coronavirus/country/lsrael/</a>

# Situation in Singapore

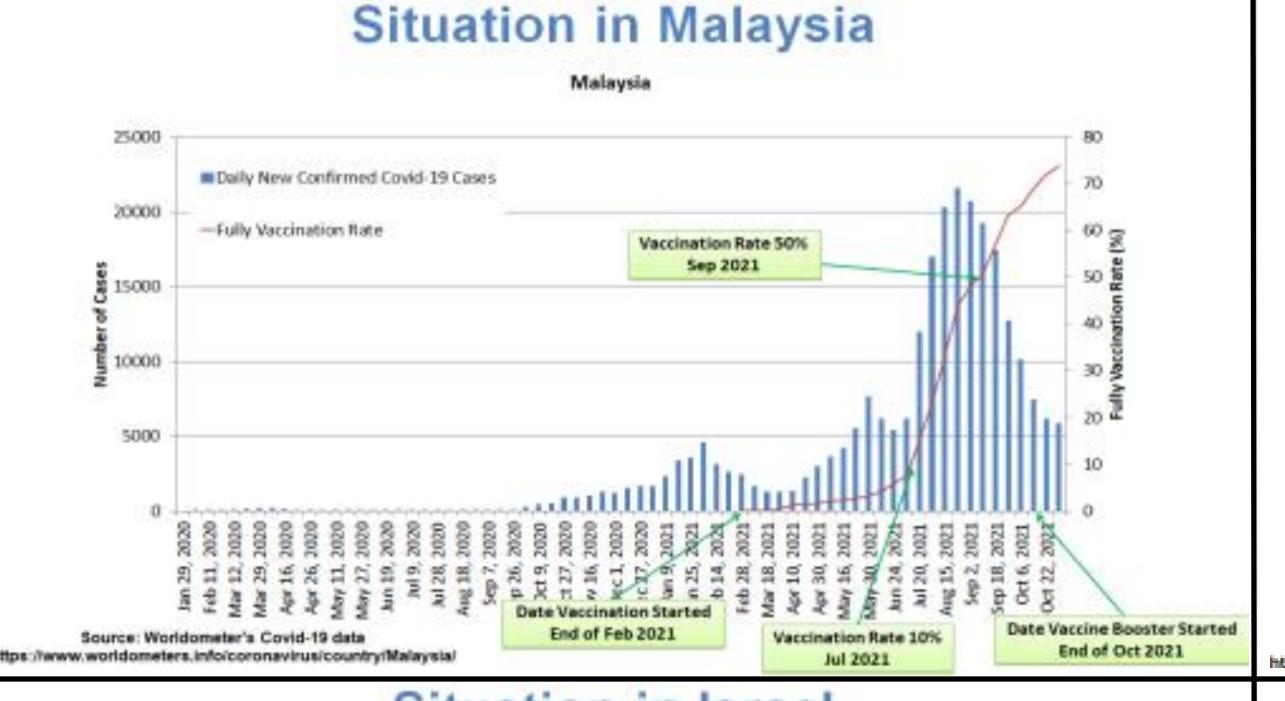


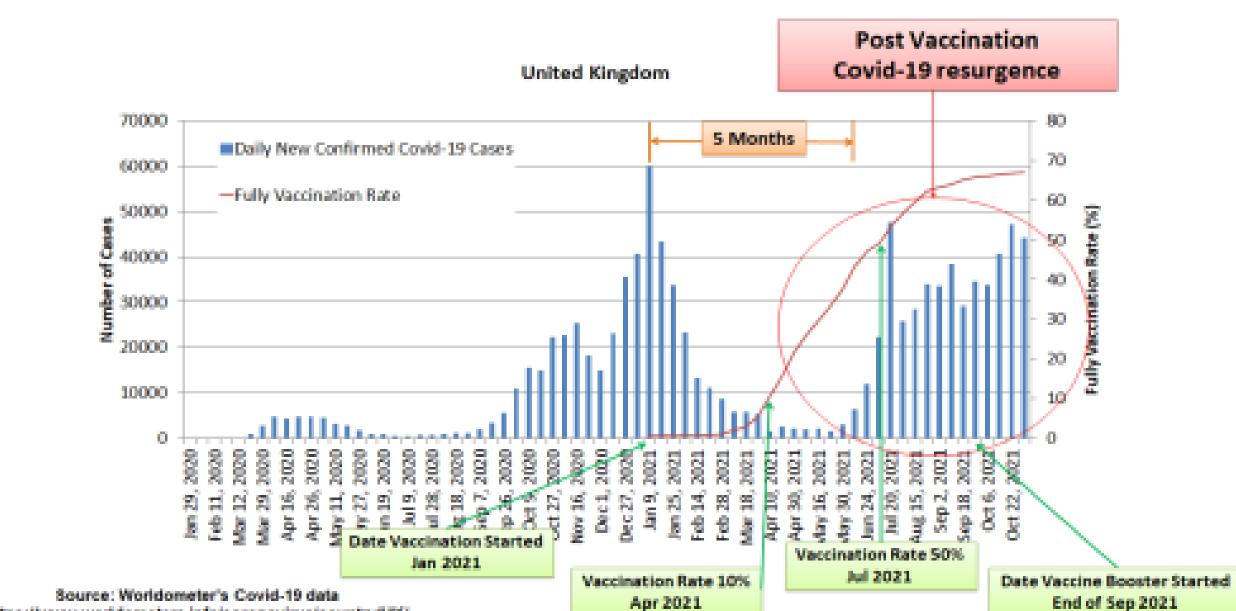
# Situation in Singapore

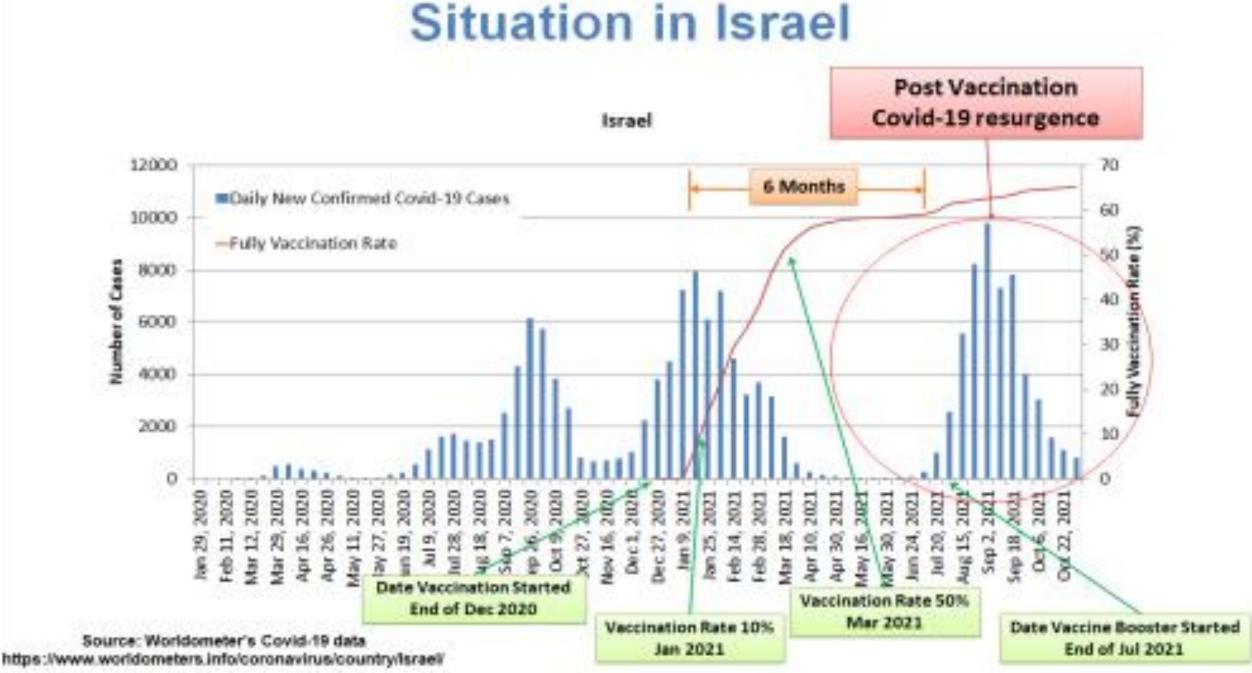
### Daily New Deaths in Singapore

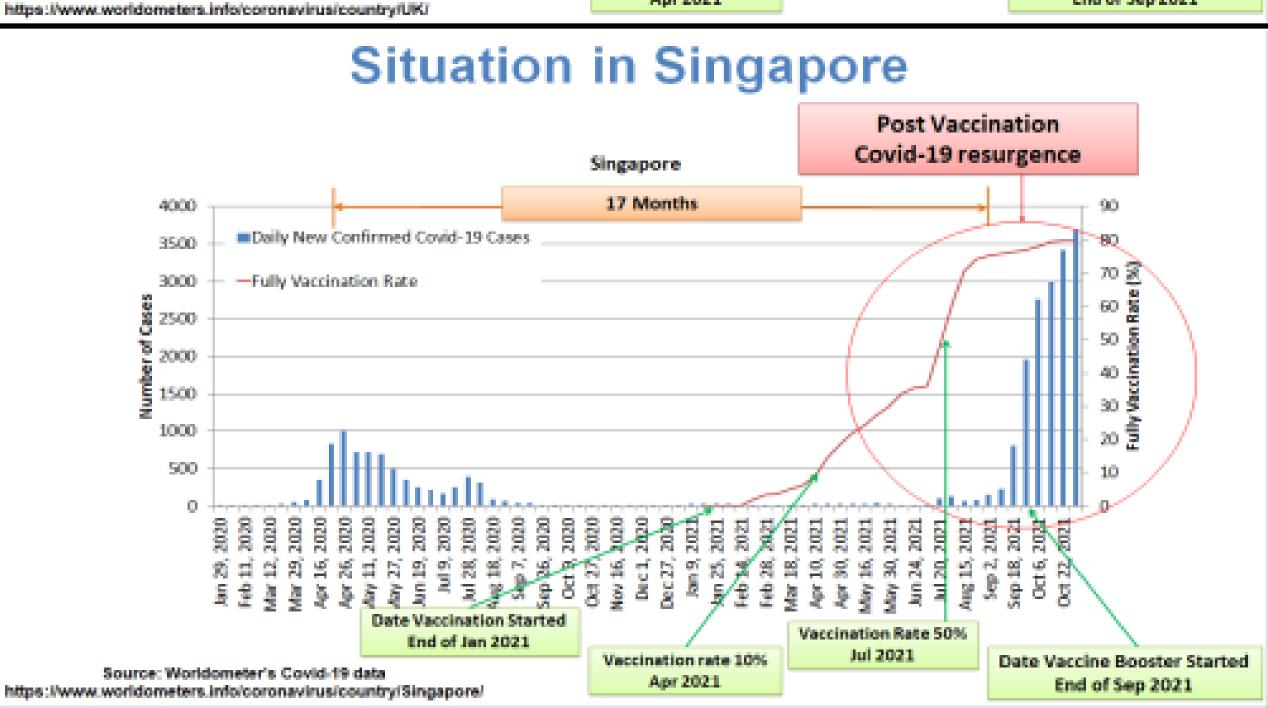


Comparing the Daily New Cases and Fully Vaccination Rate in Malaysia against UK, Israel and Singapore Situation in Malaysia

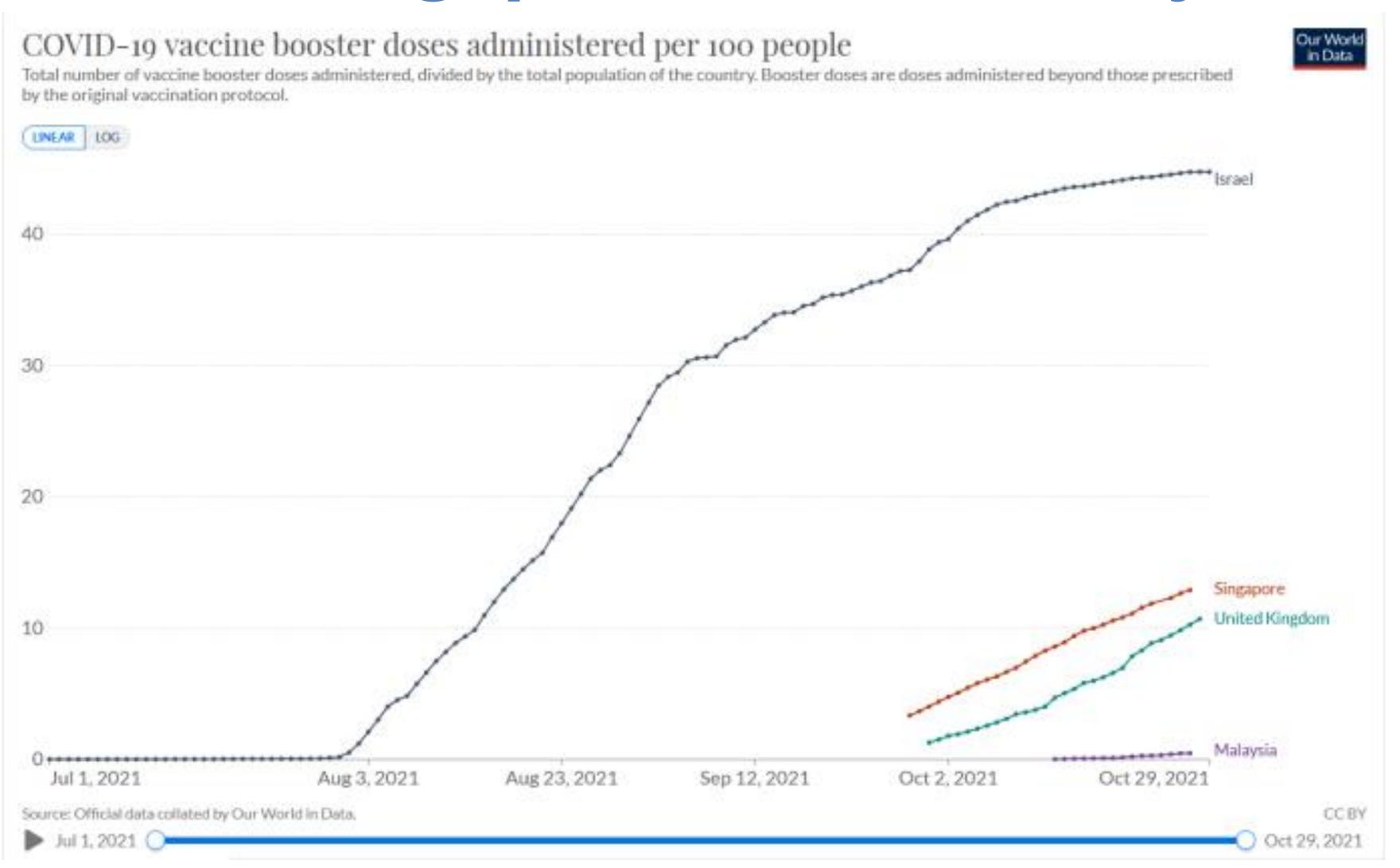








# Vaccination Booster Situation in Israel, Singapore, UK and Malaysia



# When is the next Big Wave Post Vaccination for Malaysia?

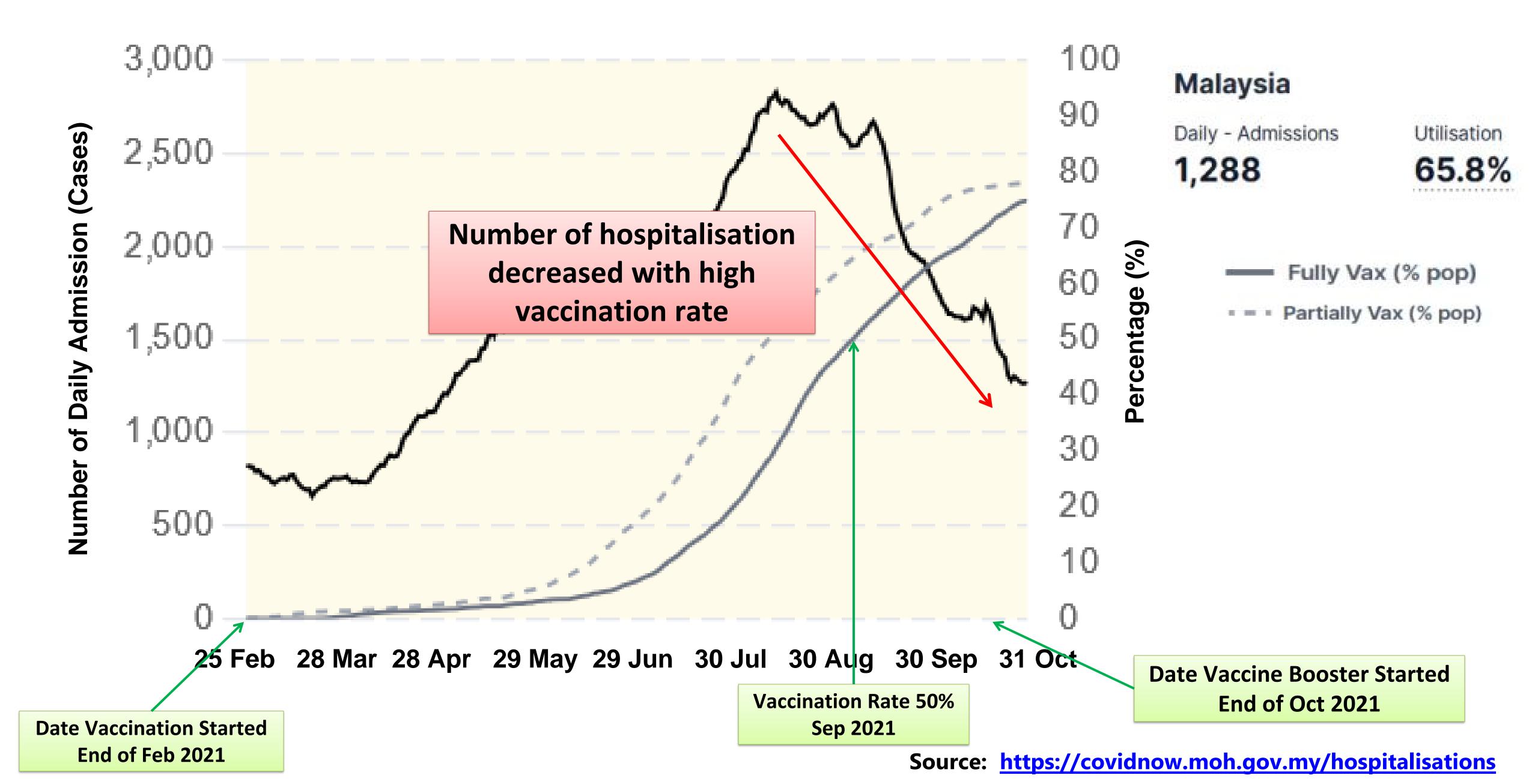
Country	Date Vaccination started	Vaccination Rate 10%	Vaccination Rate 50%	Vaccination Rate 60%	Date Vaccine Booster started	Peak of Prevaccinate Wave	Start of post vaccinate wave
Israel	End of Dec 2020	Jan 2021	16 March 2021	21 July 2021	End of July 2021	Jan 2021	July 2021
UK	Jan 2021	April 2021	7 July 2021	17 Aug 2021	End of Sept 2021	Jan 2021	June 2021
Singapore	End of Jan 2021	April 2021	23 July 2021	3 Aug 2021	End of Sept 2021	April 2020	Sept 2021
Malaysia	End of Feb 2021	July 2021	6 Sept 2021	24 Sept 2021	End of Oct 2021	Aug 2021 (Current Malaysia)	Malaysia next wave Jan/ Feb 2022?

Other highly vaccinated countries have another post vaccination reoccurance 5-6 months after the peak of the prevaccination wave!

# Important Take away on the timing of Malaysia next wave comparing with Israel, UK and Singapore

- 1. Both Israel and UK vaccinated their population 3-6 months earlier than Malaysia.
- 2. Their **current post vaccination wave started** about **5-6 months** after the peak of the previous prevaccination wave.
- 3. Israel started aggressively giving booster jabs at the end of July and have managed to reduce the current cases to very low level. However, UK did not start giving booster jab until end of September and currently cases are still rising.
- 4. Singapore manage to keep cases very low for most of 2021 by having very strict border and movement control. However, after they fully vaccinated by 75% of their population by August, they started opening up and by now the current cases are among the highest per capita in the world.
- 5. Therefore, based on the above, Malaysia is likely to have our **post vaccination big** wave in Jan/ Feb 2022. However, if we start aggressively giving the booster doses now, we might have a chance to avoid the next big wave. (Currently the booster dose for Malaysia is about 1%.).

### COVID-19 Hospital Admissions vs Percentage of Population Vaccinated



# Is COVID-19 going to be over soon?



"Kita harus menerima hakikat bahawa sekalipun kita berjaya mengawal pandemik ini, kita juga perlu bersedia untuk menerima kenyataan bahawa akan tiba masanya nanti COVID-19 akan menjadi endemik dan untuk itu, kita mesti hidup bersama virus ini."

YB Khairy Jamaluddin Menteri Kesihatan 1 Sep 2021

### **New Government Direction**

"We have to accept the fact that even if we are able to control this pandemic, we will also need to accept the fact that there will come a day when COVID-19 will become endemic and for that matter, we will co-exist with the virus."

Moving forward a more enhanced level of contact tracing become very important.

YB Khairy Jamaluddin Health Minister 1 Sept 2021

# Potential impact of this new government policy changing from pandemic to endemic control

- Government has relaxed travel restrictions, dining in restaurants, religious institutions, hotels, cinemas, gym etc
- Therefore more likely for you will come in contact with people with COVID-19 who maybe asymptomatic due to vaccination
- Although death rates and serious diseases are falling, data from Israel seems to suggest a lesser decrease as compared to UK
- Therefore it is imperative that you improve your SOP and take precautions not to catch COVID-19 and become seriously ill or die.

## In conclusion....

- 1. COVID-19 will probably will be with us forever
- We likely need to regularly take booster doses to renew our immunity especially towards new variants
- 3. We need the Booster Dose ASAP to prevent a possible next big wave coming in Jan/ Feb 2022



# So how protective is our current vaccination program?

#### ORIGINAL ARTICLE

### Waning Immune Humoral Response to BNT162b2 Covid-19 Vaccine over 6 Months

Einav G. Levin, M.D., Yaniv Lustig, Ph.D., Carmit Cohen, Ph.D., Ronen Fluss, M.Sc., Victoria Indenbaum, Ph.D., Sharon Amit, M.D., Ram Doolman, Ph.D., Keren Asraf, Ph.D., Ella Mendelson, Ph.D., Arnona Ziv, M.Sc., Carmit Rubin, M.Sc., Laurence Freedman, Ph.D., Yitshak Kreiss, M.D., and Gili Regev-Yochay, M.D.

#### ABSTRACT

#### BACKGROUND

Despite high vaccine coverage and effectiveness, the incidence of symptomal infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has been increasing in Israel. Whether the increasing incidence of infection is due to waning immunity after the receipt of two doses of the BNT162b2 vaccine is unclear.

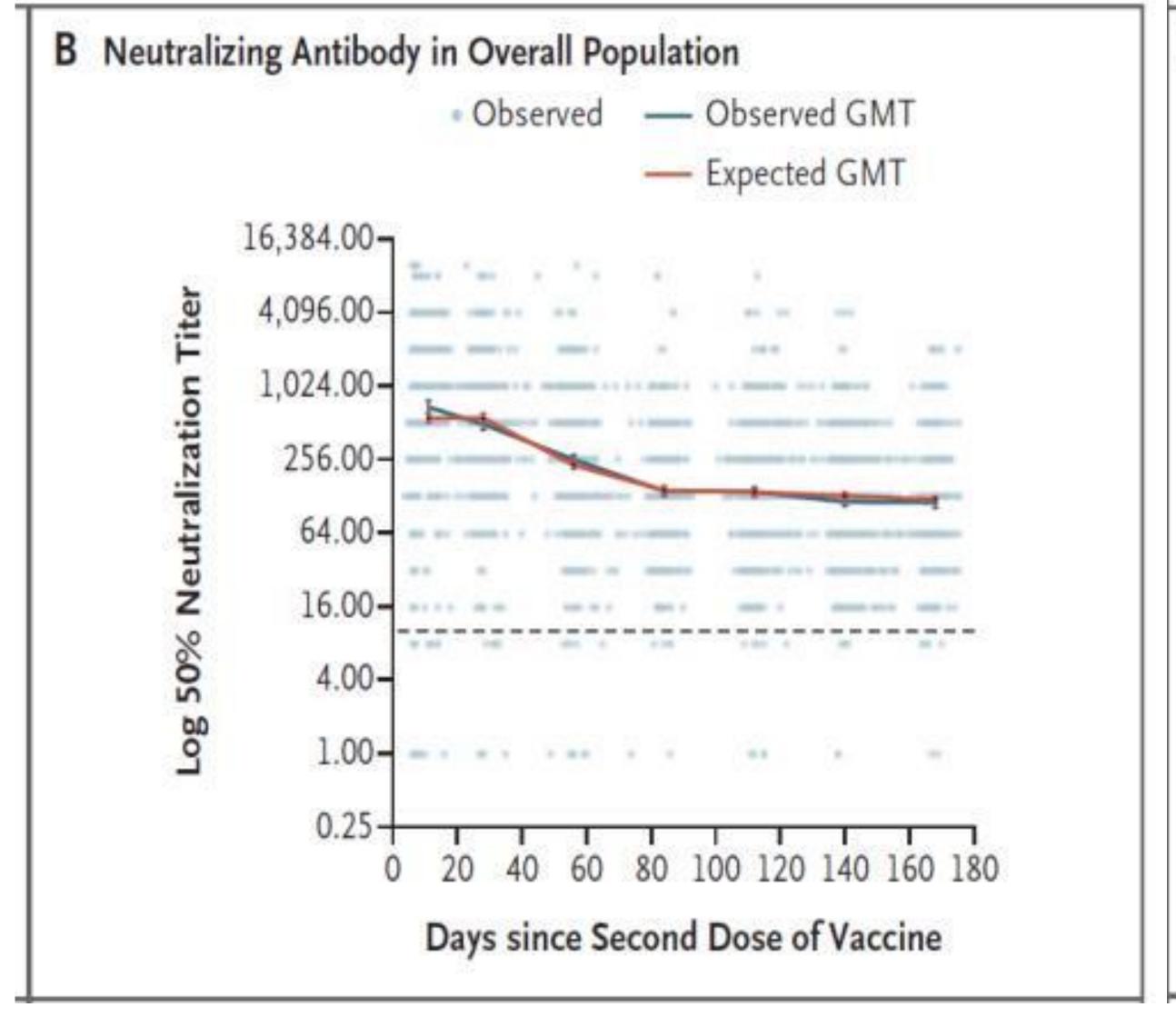
#### METHODS

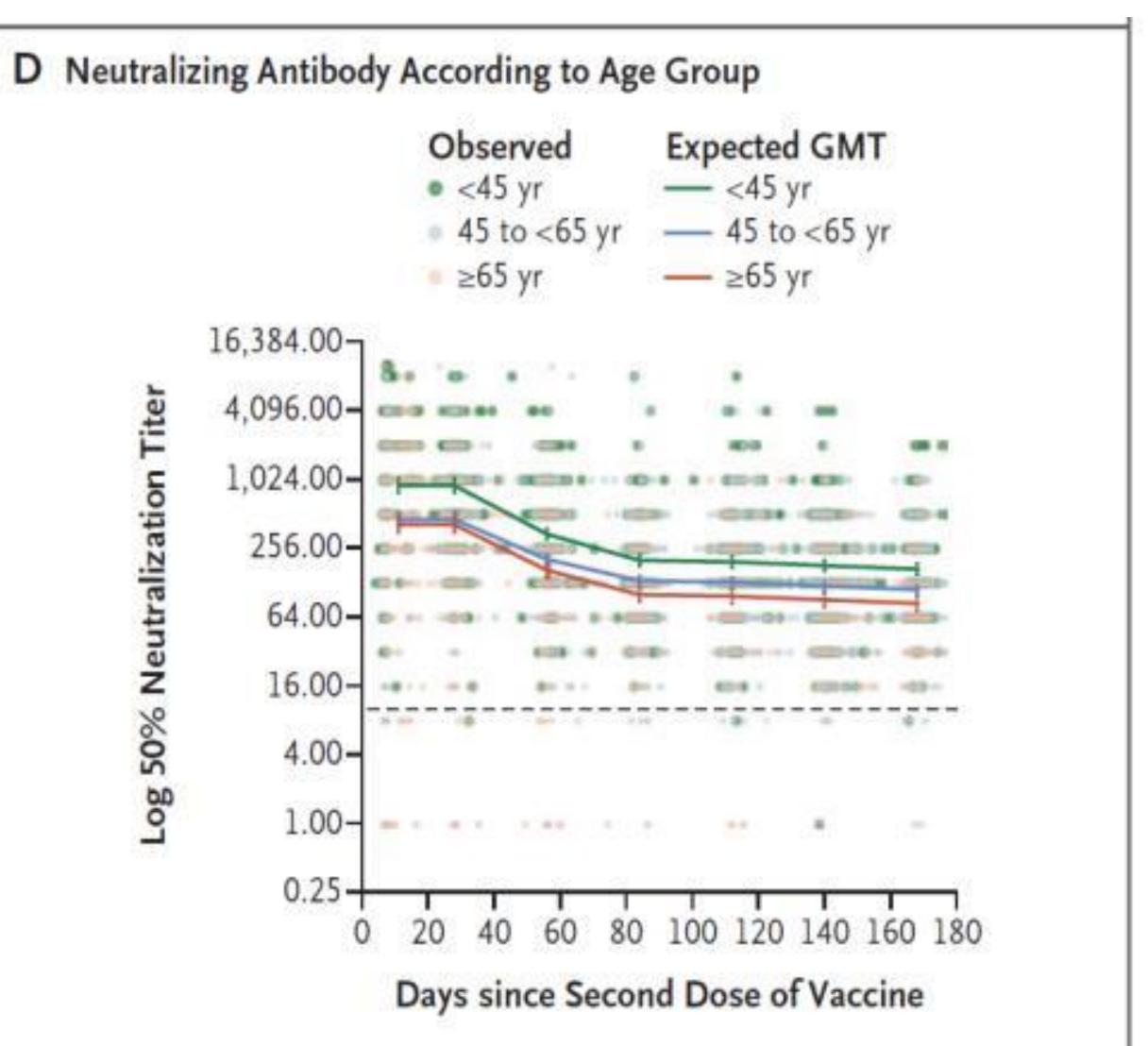
We conducted a 6-month longitudinal prospective study involving vaccinated health care workers who were tested monthly for the presence of anti-spike IgG and neutralizing antibodies. Linear mixed models were used to assess the dynamics of antibody levels and to determine predictors of antibody levels at 6 months.

6 months after receipt of the second dose vaccine, the level of antibodies and humoral immunity response were substantially decreased.

trol Un

# Antibodies drop drammatically 3 months after vaccination (Pfizer)





### Israeli research: 3rd vaccine dose produces 10 times more antibodies than 2nd

Amid talk of 4th dose, serological study at Sheba hospital stokes optimism that booster shot may offer longer-lasting protection than previously thought

By TOI STAFF

15 September 2021, 9:19 am | IIII













An Israeli woman receives a COVID-19 vaccine at a Clalit health care maintenance organization vaccination center in Jerusalem, September 9, 2021. (Olivier Fitoussi/Flash90)

A serological study conducted at an Israeli hospital has found that antibody levels in the body after the administration of a third COVID-19 vaccine dose were ten times higher than those detected after the second dose.

The preliminary results, seen among vaccinated staff at Sheba Medical Center in Ramat Gan, outside 7 viv, stoked optimism as to the amount of time the boo Kan public broadcaster reported Tuesd

At least 12 days after the booster dose, the rate of confirmed infection was lower in the booster group than in the non-booster group by a factor of 11.3 and the rate of severe illness was lower by a factor of 19.5.

OVID-19 cafter the

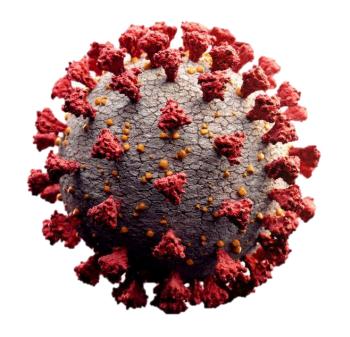
- https://www.timesofisrael.com/israeli-research-3rd-vaccine-dose-produces-10-times-more-antibodies-than-2nd/
- https://www.nejm.org/doi/full/10.1056/NEJMoa2114255

# What can you do to mitigate your risk of catching COVID-19?

"If you know your enemy and know yourself, you need not fear the results in a hundred battles"

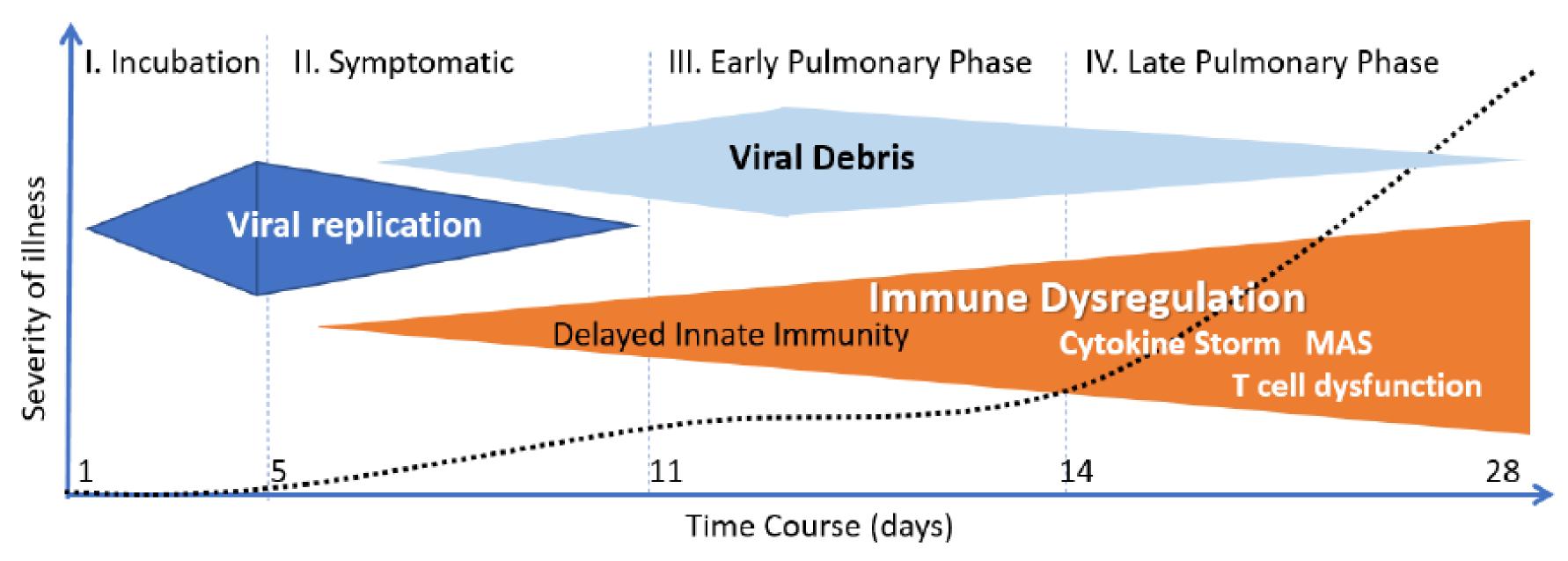
- Sun Tzu

## What is COVID-19?



- Coronavirus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus
- Symptoms includes mild to moderate respiratory illness to seriously ill and which requires medical attention
- Older people and those with underlying medical conditions like cardiovascular disease, diabetes, chronic respiratory disease, or cancer are more likely to develop serious illness
- Anyone can get sick with COVID-19 and become seriously ill or die at any age

### Understanding COVID-19 infection timeline



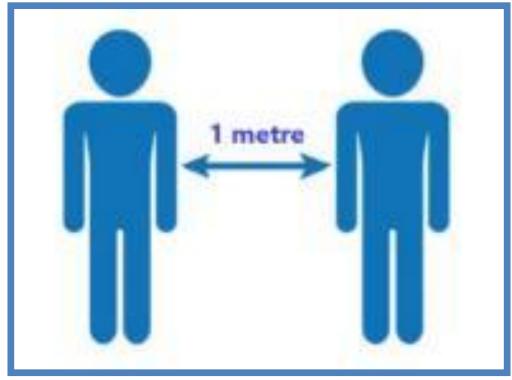
### Important points:

- 1. Incubation period is about 4-5 days after exposure.
- 2. Symptoms will appear at about Day 4-5 when viral replication is at its peak
- 3. Viral replication eventually stops at day 10 after exposure
- 4. Therefore, patients if recovered should be not infectious after Day 10
- 5. However, virus and viral debris can trigger a delayed innate immunity reaction leading to an immune dysregulation and cytokine storm and the disease can progress to the lung and other organs
- 6. Therefore, the challenge is to prevent infected people from infecting their close contacts and to prevent them from progressing into pulmonary phase

Can SOPs, Air Treatment and Sprays & Gargles reduce risk of infection?

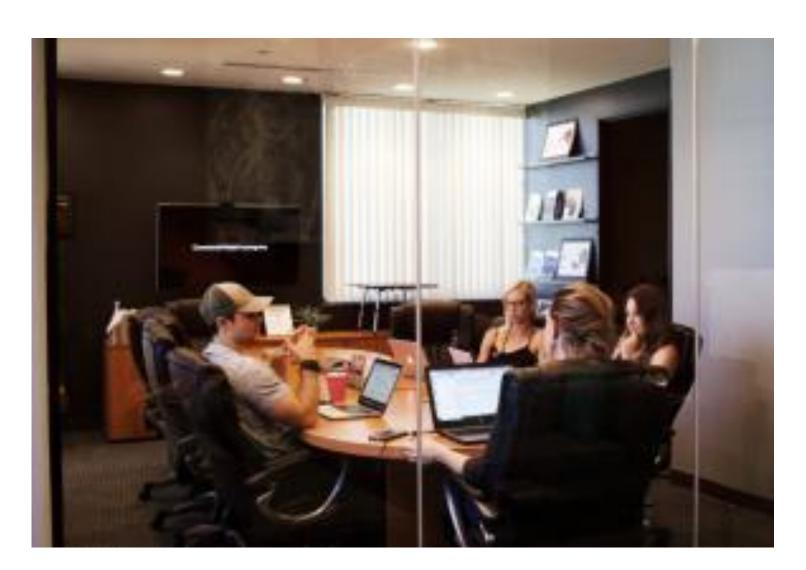
# SOP and Air Management

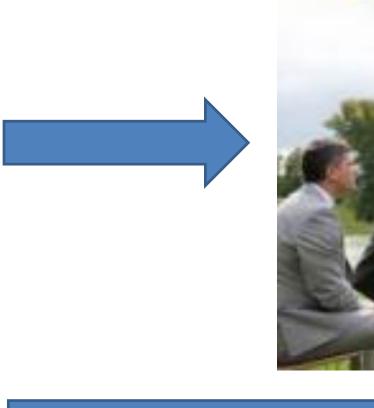














Meeting in enclosed area

Virtual Meeting

SOP and Air Management

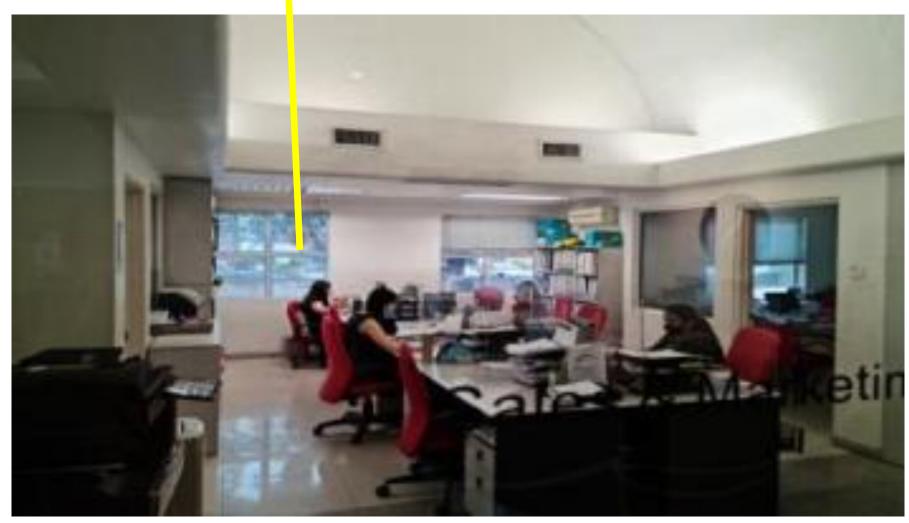




Plasmacluster ionizer



Air Oasis Bi-Polar® 2400 BMS





Portable plasmacluster ionizer/HEPA filter for small office room

For Indoor areas, ensure good ventilation or Air treatment

### Indoor Air Quality

Minimum
2
Fresh Air
Change/ hr

Carbon
Dioxide
800ppm
maximum

1000-3000ppm plasmacluster or bi-polar ions/cm<sup>3</sup>

From own Our experience, these conditions are able to totally prevent the spread of COVID-19 in our workplace

# No SOPs can be perfect

So what else can you do to mitigate the risk of catching COVID-19?







### Can Gargles and Sprays Mitigate the Covid-19 Virus?

- 1. Povidone lodine throat spray and mouthwash
- 2. Hypertonic saline nasal spray and gargles
- 3. Steam inhalation



### Povidone Iodine Nasal and Throat Spray, Gargle and Mouthwash

- Povidone iodine has been used as a disinfectant.
- There are evidences that it can provide a protective layer over nasal and oral mucosa, so that coronavirus cannot bind to the angiotensin-converting enzymes 2 (ACE-2) receptor and prevent their entry inside. [1]
- Povidone Iodine orally rapidly inactivated 100% of SARS-Co-V-2 virus in 15 seconds [1] This significant drop in viral load could remain for at least 3 hours in COVID-19 patients. [2]
- It was recommended to self-administered 3 times daily to reduce the risk of infection when compared with vitamin C, a significant absolute risk reductions of 24% was observed for povidone iodine throat spray. [3]



- 1. <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7300649/pdf/JOPR-9999-na.pdf">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7300649/pdf/JOPR-9999-na.pdf</a>
- . https://onlinelibrary.wiley.com/doi/full/10.1111/odi.13526
- 3. https://www.sciencedirect.com/science/article/pii/S1201971221003453

### Hypertonic Saline Nasal Irrigation and Gargling (HSNIG)

- Hypertonic Saline Nasal Irrigation and Gargling (HSNIG) significantly washes off SARS-CoV-2 from nasal cavity and pharynx and prevents microaspiration of SARS-CoV-2 in lung alveoli.
- The studies has shown HSNIG would help in reducing symptoms and duration of illness in Covid-19 by an average of 2½ days. [1]
- Total number of patients in the study group became RT-PCR negative is about double of the control group. [2]



- 1. <a href="https://jogh.org/documents/issue202001/jogh-10-010332.pdf">https://jogh.org/documents/issue202001/jogh-10-010332.pdf</a>
- 2. <a href="https://www.researchsquare.com/article/rs-153598/v1">https://www.researchsquare.com/article/rs-153598/v1</a>

### Steam Inhalation

- High temperature can cause irreversible denaturation of proteins and loss of virus infectivity. Steam inhalation (at 55-56°C) for 20 min daily for 4 consecutive days eased the symptoms of asymptomatic and symptomatic patients. [1]
- The symptoms of the COVID-19 patients were drastically reduced after 1 week use
  of the steam inhalation [2]



Figure 1A: Technique of steam inhalation where patient is leaning forward over the steamer and head covered with a towel;

Figure 1B: representative image of steamer.

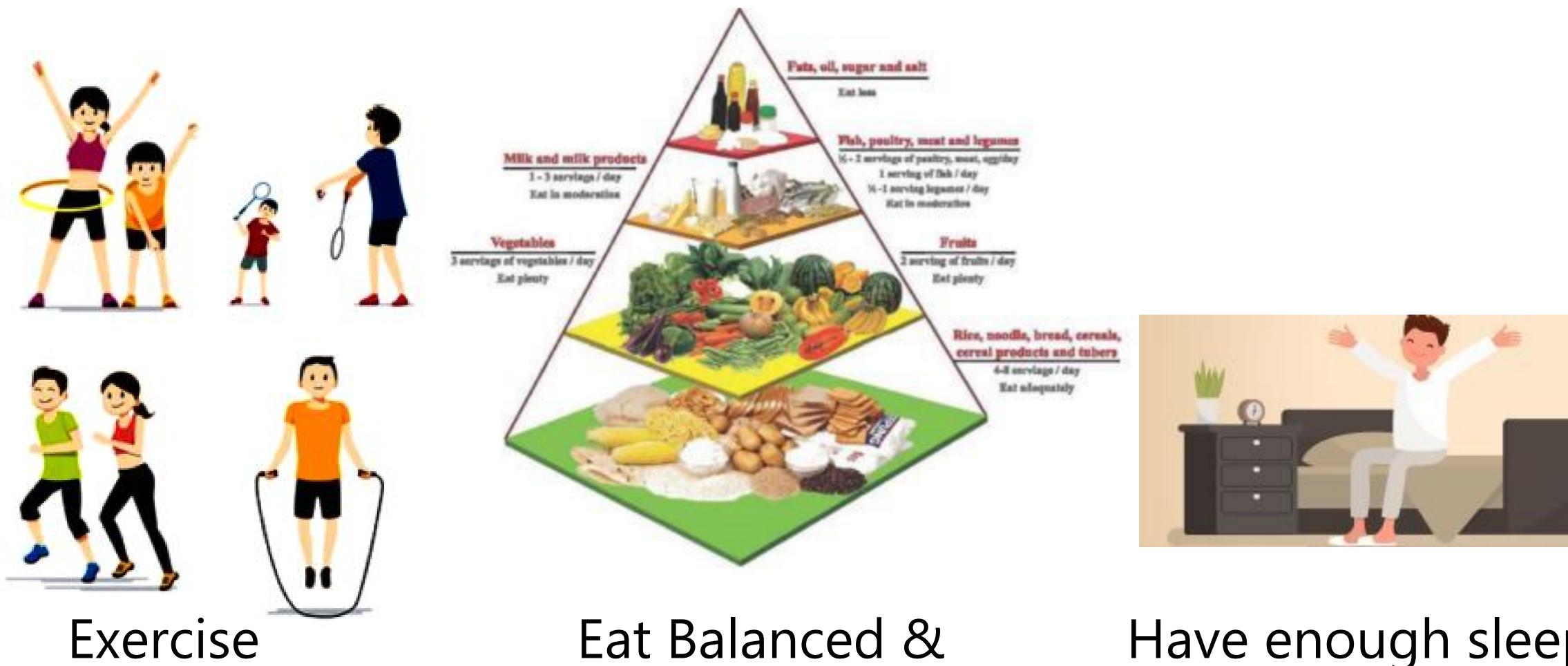


The evidence for steam inhalation is not conclusive, but appears to help to ease the Covid-19 symptoms.

- 1. <a href="https://www.sciencedirect.com/science/article/pii/S002432052031554X">https://www.sciencedirect.com/science/article/pii/S002432052031554X</a>
- 2. <a href="https://ijcrr.com/uploads/3450\_pdf.pdf">https://ijcrr.com/uploads/3450\_pdf.pdf</a>

Are there other things we can do or take to reduce our risk of catching COVID-19

### Essential approach to boost your immune system



Eat Balanced & Healthier Foods Have enough sleep

# Can supplements reduce your risk of catching COVID-19?



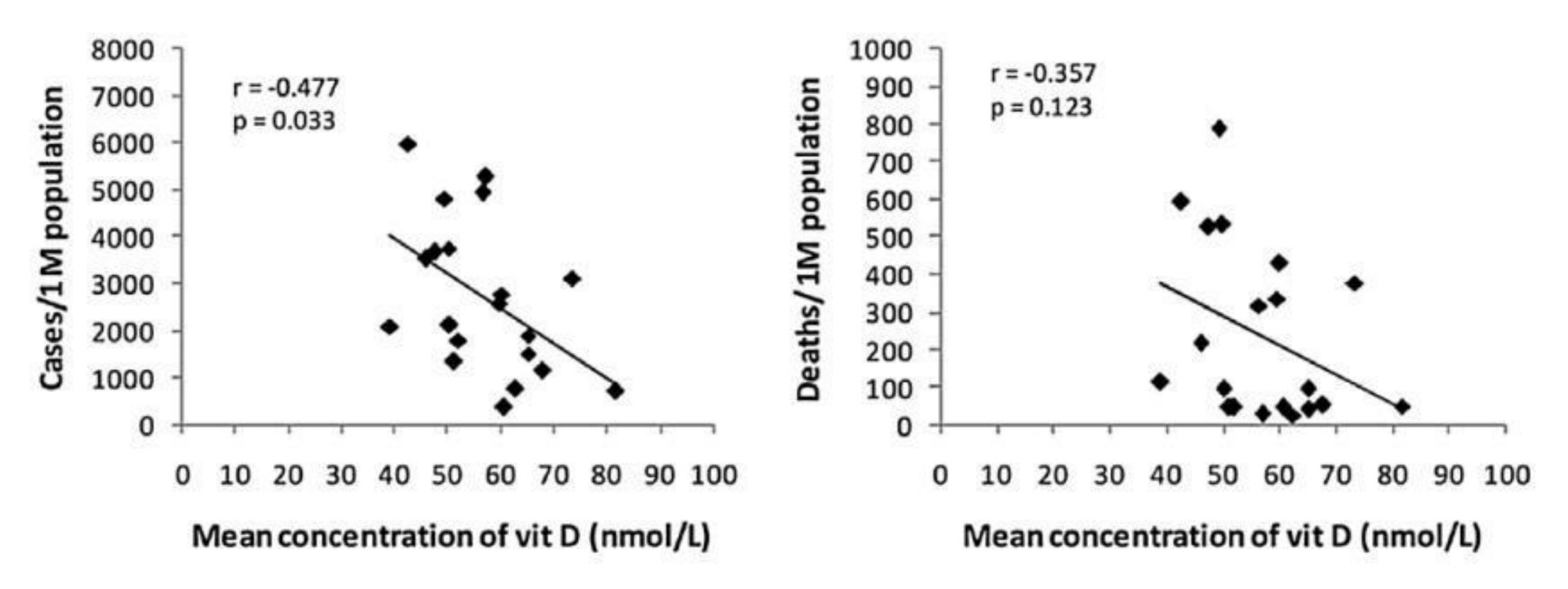
Vitamin C, Vitamin D3, Zinc, Quercetin, Omega-3 Fatty Acids and Lingzhi

### Vitamin C for COVID-19?

- Vitamin C has antioxidant, anti-inflammatory and immunosupportive properties. [1]
- Some studies shown Vitamin C may benefit COVID-19 patients by reducing inflammatory markers and mechanical ventilation<sup>[2,3]</sup>
- However "Systemic review concluded that the evidence that Vitamin C was likely to benefit COVID-19 patients was weak or absent." [4,5]
- Nevertheless, Vitamin C is good for the general health and well-being but must be consumed in reasonable doses
  - 1. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7553131/
  - 2. <a href="https://jintensivecare.biomedcentral.com/articles/10.1186/s40560-020-0432-y">https://jintensivecare.biomedcentral.com/articles/10.1186/s40560-020-0432-y</a>
  - 3. <a href="https://pubmed.ncbi.nlm.nih.gov/32662690/">https://pubmed.ncbi.nlm.nih.gov/32662690/</a>
  - 4. <a href="https://pubmed.ncbi.nlm.nih.gov/33982105/">https://pubmed.ncbi.nlm.nih.gov/33982105/</a>
  - 5. <a href="https://covid-19.moh.gov.my/kajian-dan-penyelidikan/mahtas-covid-19-rapid-evidence-updates/14\_Micronutrients\_and\_Covid-19\_Patients\_Outcome.pdf">https://covid-19.moh.gov.my/kajian-dan-penyelidikan/mahtas-covid-19-rapid-evidence-updates/14\_Micronutrients\_and\_Covid-19\_Patients\_Outcome.pdf</a>

### Vitamin D in the management of COVID-19

• Vitamin D supplementation has been shown as safe and effective against acute respiratory tract infections. Thus, people who are at higher risk of vitamin D deficiency during this global pandemic should consider taking vitamin D supplements to maintain the circulating 25(OH)D in the optimal levels (75–125 nmol/L).



Correlation between vitamin D levels and the number of COVID-19 cases and deaths/1 M population in 20 European countries. Data source: vitamin D concentration from the reference Lips et al. [60], and COVID-19 cases and mortality as of 20 May 2020 from worldwide COVID-19 pandemic data portal at https://www.worldometers.info/coronavirus/ [27].

1. https://pubmed.ncbi.nlm.nih.gov/32605780/

### Vitamin D in the management of COVID-19

- Vitamin D favourably modulates host responses to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), both in the early viraemic and later hyperinflammatory phases of COVID-19. [2]
- Lower mortality rate from elderly COVID-19 patients who received an oral bolus of vitamin D of 80,000 I.U. either in the week following suspicion or diagnosis of COVID-19 or in the previous month 17.5% mortality (10/57) compared to group who did not received vitamin D 55.6% (5/9).<sup>[3]</sup>

<sup>2. &</sup>lt;a href="https://www.thelancet.com/action/showPdf?pii=S2213-8587%2820%2930268-0">https://www.thelancet.com/action/showPdf?pii=S2213-8587%2820%2930268-0</a>

<sup>3.</sup> https://royalsocietypublishing.org/doi/pdf/10.1098/rsos.201912

### Vitamin D in the management of COVID-19

"There was very limited retrievable evidence on association between Vitamin D and outcome in patients with Covid-19. Most patients who have COVID-19 were vitamin D deficient. However, direct association between Vitamin D and the outcome in COVID-19 patients cannot be determined."

KKM, 4 Dec 2020

### Zinc in the Management of COVID-19

- Zinc (Zn) has roles in the preservation of immune health and has antiviral immunity and anti-inflammatory properties. [1]
- Zinc deficiency causes increased production of proinflammatory cytokines during Auto Immune Disease (AID). Thus, zinc supplementation should be considered for AID patients with low serum zinc values and high inflammatory parameters.<sup>[2]</sup>

- 1. https://pubmed.ncbi.nlm.nih.gov/33921297
- 2. <a href="https://reader.elsevier.com/reader/sd/pii/S0955286319308332?token=A5B444543270F02149EB88ACEB6CDF">https://reader.elsevier.com/reader/sd/pii/S0955286319308332?token=A5B444543270F02149EB88ACEB6CDF</a>
  <a href="https://reader.elsevier.com/reader/sd/pii/S0955286319308332?token=A5B444543270F02149EB88ACEB6CDF">https://reader.elsevier.com/reader/sd/pii/S0955286319308332?token=A5B444543270F02149EB88ACEB6CDF</a>
  <a href="https://reader.elsevier.com/reader/sd/pii/S0955286319308332?token=A5B444543270F02149EB88ACEB6CDF absolute for the property of the

Correlation between Zinc Deficiency and the Number of COVID-19 Cases and Deaths

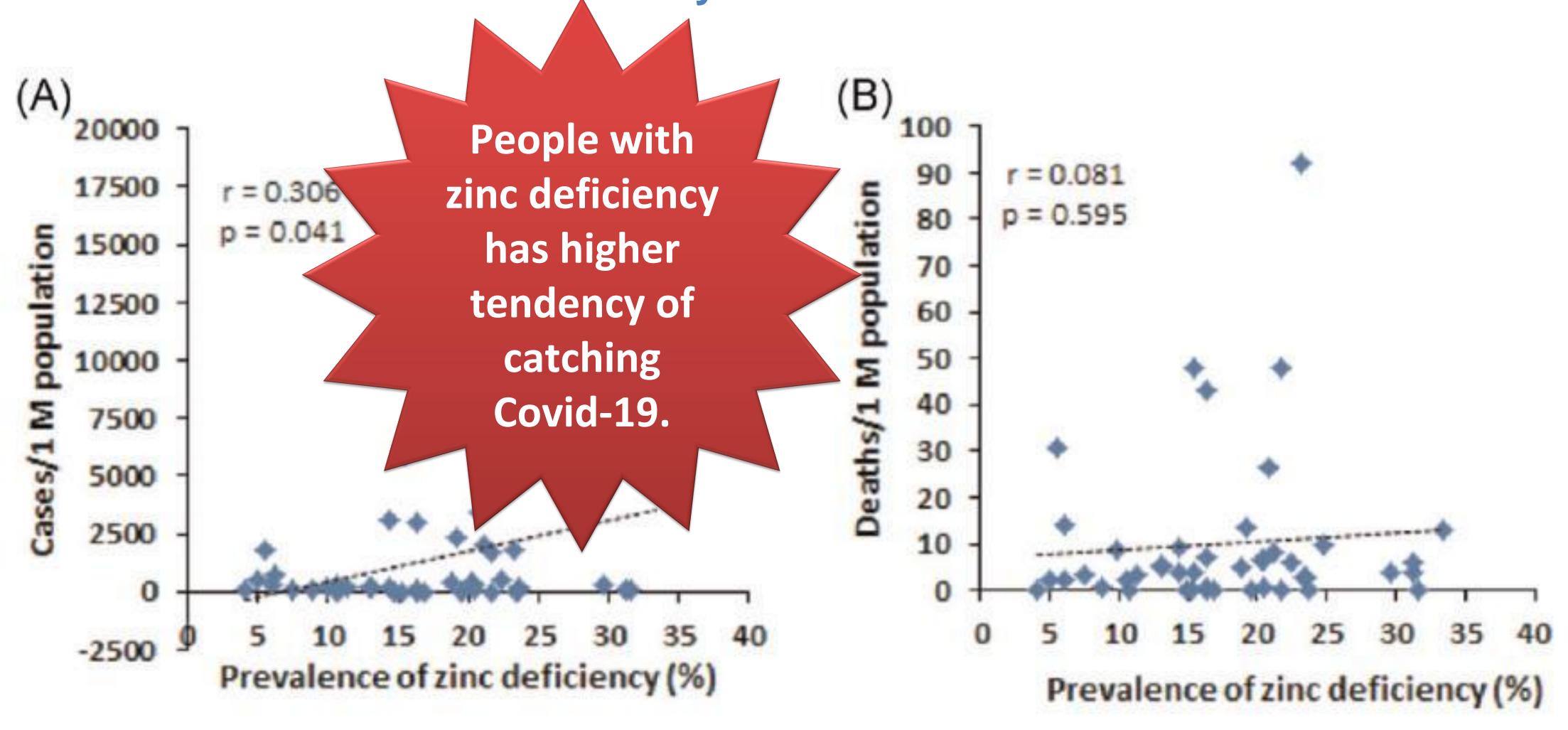


Figure: Correlation between zinc deficiency and the number of COVID-19 cases and deaths/1M population in 45 Asian countries.

Source: Global prevalence of zinc deficiency 2005 (https://ourworldindata.org/grapher/global-prevalence-of-zinc-deficiency?time=2005), and COVID-19 cases and mortality as of May 30, 2020 (A and B) from worldwide COVID-19 pandemic data portal at <a href="https://www.worldometers.info/coronavirus/">https://www.worldometers.info/coronavirus/</a>

3. https://onlinelibrary.wiley.com/doi/epdf/10.1002/jmv.26932

### Zinc in the Management of COVID-19

 "There were evidence that zinc sulphate may play a role in therapeutic management for Covid-19."

KKM, 4 Dec 2020

### Omega-3 Fatty Acids

- Examples of Omega-3 Fatty acids are including DHA, EPA, ALA
- Important for general health and well being
- Has anti-inflammatory properties
- It also reduced the mechanical ventilation and death rate among Covid-19 patients. [1]
- Another large UK study showed that those taking Omega-3, Probiotics, Multivitamins and Vitamin D had lower risk of Covid-19 infection by 9 – 14%. [2]

- 1. <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8345773/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8345773/</a>
- 2. <a href="https://nutrition.bmj.com/content/early/2021/04/20/bmjnph-2021-000250">https://nutrition.bmj.com/content/early/2021/04/20/bmjnph-2021-000250</a>

### Omega-3 Index and Clinical Outcomes of Severe COVID-19: Preliminary Results of a Cross-Sectional Study

Rodrigo Zapata B. <sup>1</sup>, José Miguel Müller <sup>1</sup>, Juan Enrique Vásquez <sup>1</sup>, Franco Ravera <sup>1</sup>, Gustavo Lago <sup>2</sup>, Eduardo Cañón <sup>3</sup>, Daniella Castañeda <sup>3</sup>, Madelaine Pradenas <sup>3</sup> and Muriel Ramírez-Santana <sup>4,4</sup>

Table 2. Demographic, clinical, and fish consumption profiles of the participants stratified by O3 Index quartiles.

Categ	gorical by O3 Index Quartile	Q1: $\leq 3.56\%$ (n = 19) [n (%)]	Q2: $3.57-4.15\%$ (n = 18) $[n \ (\%)]$	Q3: $4.16-4.52\%$ (n = 19) $[n \ (\%)]$	Q4: $\geq$ 4.53% (n = 18) [n (%)]	Total Mean $\pm$ SD [ $n$ (%)]
Age	(Mean ± SD)	$60.3 \pm 11.9$	$57.6 \pm 11.1$	$60.0 \pm 15.5$	$60.8 \pm 15.9$	$59.68 \pm 13.6$
Sex	(Male)	12 (63.2)	10 (55.6)	7 (36.8)	10 (55.6)	39 (52.7)
BMI	$(Mean \pm S.D.)$	$26.6 \pm 5.5$	$30.8 \pm 5.9$	$30.9 \pm 6.5$	$29.5 \pm 6.3$	$29.47 \pm 6.14$
	Tobacco consumption	4 (21.1)	1 (5.6)	1 (5.3)	0.0	6 (8.1)
	Diabetes	5 (26.3)	9 (50.0)	6 (31.6)	7 (38.9)	27 (36.5)
Hypertension		6 (31.6)	9 (50.0)	10 (52.6)	10 (55.6)	35 (47,3)
Asthma or chronic lung disease		2 (10.5)	1 (5.6)	3 (15.8)	6 (33.3)	12 (16.2)
	250	Fish consumption				
	Two or more times a week	4 (21.0)	3 (16.7)	3 (15.8)	2 (11.1)	13 (17.6)
	Less than two times a week	13 (63.2)	10 (55.6)	14 (63.2)	13 (72.2)	50 (67.5)
	Does not consume	2 (10.5)	4 (22.2)	2 (10.5)	3 (16.7)	11 (14.9)
	Ty	pe of fish consume	ed			
	(Over 300 mg O3/100 g)	4 (21.1)	6 (33.3)	3 (15.8)	5 (27.8)	18 (24.3)
	Tuna, hake, croaker, pippin (200-300 mg O3/100 g)	13 (68.4)	8 (44.4)	14 (73.7)	10 (55.6)	45 (60.1)
	Does not consume	2 (10.5)	4 (22.2)	2 (10.5)	3 (16.7)	11 (14.9)
	Me	thod of cooking fi	sh			
	Oven, griddle, pot, canned, raw	10 (52.7)	5 (27.8)	10 (52.7)	6 (33.3)	31 (41.9)
	Fried	7 (36.8)	9 (50.0)	7 (36.9)	9 (50.0)	32 (43.2)
	Does not consume	2 (10.5)	4 (22.2)	2 (10.5)	3 (16.7)	11 (14.9)
O3	supplement consumption	0.0	0.0	1 (5.3)	2 (11.1)	3 (4.1%)
	Mechanical ventilation	14 (73.7)	12 (66.6)	11 (57.9)	6 (33.3)	43 (58.1)
	Death	7 (36.8)	1 (5.6)	5 (26.3)	1 (5.6)	14 (18.9)

Omega-3 fatty acids reduce the mechanical ventilation and death rate among Covid-19 patients

O3: Omega-3; Q: Quartile; BMI: Body Mass Index; SD: Standard deviation; n: Number of individuals

3. https://www.mdpi.com/1660-4601/18/15/7722

### Flavonoids eg Quercetin

- Flavonoids are natural compounds found in many fruits and vegetables [1]
- Quercetin, as an anti-inflammatory, antioxidant, analgesic and anti-inflammatory compound, is probably a potential treatment for severe inflammation which is one of the main life-threatening conditions in patients with COVID-19. [2]
- Quercetin an important adjuvant role capable to attenuate and likely slow the disease progression and indirectly underline once more the importance of herbal medicine in counteracting COVID-19. [3]
- "A cell has a lock, and the virus has a key [to enter and infect the cell];" "But quercetin puts glue in the lock." Therefore, we anticipate that Quercetin could be a therapeutic tool to be assayed against COVID-19, either alone or in combination with other nutritional substances, antivirals, or other drugs. [4]
- 1. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4808895/pdf/nutrients-08-00167.pdf
- 2. <a href="https://journal-inflammation.biomedcentral.com/track/pdf/10.1186/s12950-021-00268-6.pdf">https://journal-inflammation.biomedcentral.com/track/pdf/10.1186/s12950-021-00268-6.pdf</a>
- 3. <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8238537/pdf/ijgm-14-2807.pdf">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8238537/pdf/ijgm-14-2807.pdf</a>
- 4. <a href="https://journals.sagepub.com/doi/pdf/10.1177/1934578X20976293">https://journals.sagepub.com/doi/pdf/10.1177/1934578X20976293</a>



CLINICAL TRIAL REPORT

# Potential Clinical Benefits of Quercetin in the Early Stage of COVID-19: Results of a Second, Pilot, Randomized, Controlled and Open-Label Clinical Trial

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**Results:** The interim results reveal that after 1 week of treatment, 16 patients of the QP group were tested negative for SARS-CoV-2 and 12 patients had all their symptoms diminished; in the SC group, 2 patients were tested SARS-CoV-2 negative and 4 patients had their symptoms partially improved. By 2 weeks, the remaining 5 patients of the QP group tested negative for SARS-CoV-2, whereas in the SC group out of 19 remaining patients, 17 tested negatives by week 2, one tested negative by week 3 and one patient, still positive, expired by day 20. Concerning blood parameters, the add on therapy with QP, reduced LDH (-35.5%), Ferritin (-40%), CRP (-54.8%) and D-dimer (-11.9%).

Conclusion: QP statistically shortens the timing of molecular test conversion from positive to negative, reducing at the same time symptoms severity and negative predictors of COVID-19.

Keywords: SARS-CoV-2, RT-PCR, LDH, ferritin, CRP, D-dimer, coronavirus, phytosome®

**QP= Quercetin Phytosome** 

5. https://www.dovepress.com/getfile.php?fileID=70920

### Can you boost your immune system?



Traditional Chinese Medicine (TCM)

# For advice on the use of TCM, please listen to Dr Te and Mr Loh's talk after this

## Lingzhi (Reishi)

### Active components in Lingzhi

- Peptidoglycan
  - > anti-viral, immunomodulating effects



- Polysaccharides
  - → anti-inflammatory, hypoglycemic, antiulcer, anti-tumorigenic, immunostimulating effects
- Triterpenes
  - > anti-inflammatory, anti-tumorigenic and hypolipidemic activity

## Lingzhi in the Management of COVID-19

- The contents of proteins, triterpenes, viral replication inhibitory proteins, and immunomodulatory polysaccharides like β-D-glucan found in mushrooms as well as nutritional supplements place mushrooms in superb stead in this global crisis. Among different mushroom species, *G. lucidum (Lingzhi)* stands out as the best in terms of COVID-19 preventive and curative agents.<sup>[2]</sup>
- Currently curative drugs are limited to symptom management. Some of the medicinal mushroom like Lingzhi has inhibitory activities against the SARS-CoV-2. These mushroom extracts have bioactive polysaccharides (β-glucans) and galactomannan that are known to have immunomodulatory properties and stimulate the production of antiviral cytokines.<sup>[3]</sup>

3. <a href="https://onlinelibrary.wiley.com/doi/10.1002/ptr.6794">https://onlinelibrary.wiley.com/doi/10.1002/ptr.6794</a>

<sup>2. &</sup>lt;a href="https://www.researchgate.net/publication/351108776">https://www.researchgate.net/publication/351108776</a> Rationalization of Mushroom-Based Preventive and Therapeutic Approaches to COVID-19 Review

### The Role of Ganoderma lucidum Uptake on Some Hematological and Immunological Response in Patients with Coronavirus (COVID-19)

Migdam M. Obaid AL-jumaili<sup>1</sup>, Fahad K. Y. Al-dulaimi<sup>2</sup>, Mohammed A. Ajeel<sup>3</sup>

#### ABSTRACT

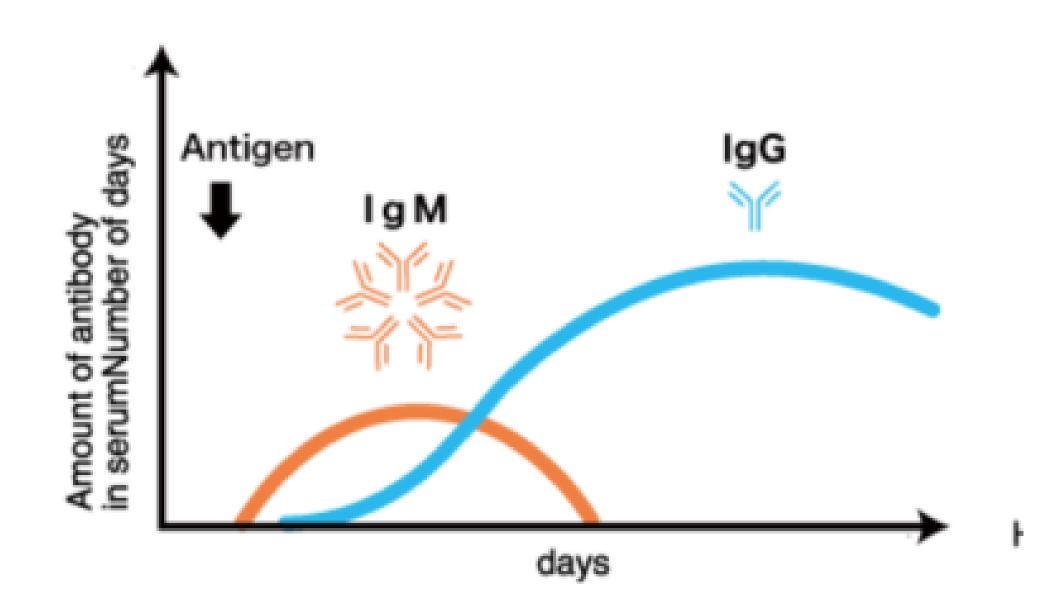
At the end of 2019, the novel coronavirus was discovered to cause pneumonia in Wuhan city in the Hubei Province, China. Later it has caused significant worldwide crises due to its fast transmission between humans, causing a widespread pandemic around the world. 150 patients with COVID-19 were collected from Shirqat hospital, their ages were between 35-55 years. The patients were divided into four groups. as follows: (1) The healthy control group: normal apparently healthy individuals, (2) G. lucidum group: Healthy individuals received G. lucidum orally, (3) COVID-19 Patients: patients infected with COVID-19, (4) Human convalescent plasma: this group treated Human convalescent plasma for intravenous injection, and (5) Patients COVID-19+ G. lucidum group: this group after infection and treated with G. lucidum, (6) COVID-19 Patients + Human convalescent plasma: this group treated with Human convalescent plasma for intravenous injection. The immunoglobulin (IgG and IgM) were positive in Patients with the COVID-19 group, whereas (IgG) only was positive in Patients COVID-19+G.lucidum and Patients COVID-19+ Human convalescent. The IgM was negative in Patients with COVID-19+G.lucidum and Patients with COVID-19+ Human convalescent groups. The result found that there was a significant change between the study groups (p<0.05) in total white blood cells, there was a less significant increase in G. lucidum group compared with control group. The lymphocyte was significantly decrease for patients with COVID-19 group compared with control group, while significant increase were seen in G. lucidum group and Human convalescent plasma compared with control group and the patients with COVID-19 + G.lucidum group results showed a significant increase compared with patients COVID-19 group. The result showed a significant decrease (p<0.05) in Patients with COVID-19 group of Hb, PCV, RBCs, and Platelet compared with the control group and G.lucidum group, while there was no significant change in the G.lucidum group and Human convalescent plasma group compared with the control group. Convalescent plasma together with the hyperimmune immunoglobulin have appositive effects on treating the COVID-19, as well as the G. lucidum has a great significant role in reducing the COVID-19 malicious effect on the studied hematological parameters. G. lucidum can be used to help in the treatment of COVID-19 infections.

Table 1. Effect of G.lucidum on IgG and IgM in Patients COVID-19

Groups	Result		
	IgG	IgM	
Control	0.000	0.000	
G. lucidum	0.000	0.000	
Patients COVID-19	2.300	6.200	
Human convalescent	0.012	0.017	
plasma			
Patients COVID-	5.200	0.080	
19+G.lucidum			
Patients COVID-19+	7.120	0.060	
Human convalescent			

<sup>\*</sup> Positive >0.1

<sup>\*</sup> Negative<0.1



https://www.sysrevpharm.org/articles/the-role-of-ganoderma-lucidum-uptake-on-some-nematological-and-immunological-response-in-patients-with-coronavirus-covid.pdf

### Effect of G. lucidum on Total and Differential White Blood Cells in Patient COVID-19

Parameter Group	Total X 10 <sup>3</sup> cell/ mm <sup>3</sup>	Lymphocytes %	Monocytes %	Neutrophils %	Eosinophil %	Basophil %
Control	9.00±0.17 e	25.00±0.20 b	7.90±0.09 a	64.10±0.19 D	2.20±0.11 c	0.80±0.06 bc
G. lucidum (Lingzhi)	9.20±0.11 d	28.10±0.12 a	8.20±0.20 a	61.80±0.32 E	1.22±0.24 d	0.65±0.10 c
Patients COVID-19	17.4±0.13 a	12.30±1.70 e	4.30±0.15 c	78.38±0.27 A	3.20±0.10 a	1.82±0.08 a
Human convalescent plasma	9.40±0.01 d	27.50±0.90 a	8.00±0.21 a	60.30±0.37 E	2.00±0.13 c	2.20±0.23 a
Patient s COVID-19 + Lingzhi	12.0±0.18 c	18.20±1.00 d	6.20±0.10 b	72.1±0.11 B	2.50±0.16 bc	1.00±0.30 b
Patients COVID-19 + Human convalescent	13.1±0.12 b	21.30±0.17 c	6.50±0.22 b	68.2±0.23 C	2.70±0.21 b	1.30±0.07 b

There were significantly less total white blood cells in the Lingzhi group compared with the Control group

Less Inflammatory Response!

<sup>4. &</sup>lt;a href="https://www.sysrevpharm.org/articles/the-role-of-ganoderma-lucidum-uptake-on-some-hematological-and-immunological-response-in-patients-with-coronavirus-covid.pdf">https://www.sysrevpharm.org/articles/the-role-of-ganoderma-lucidum-uptake-on-some-hematological-and-immunological-response-in-patients-with-coronavirus-covid.pdf</a>

# What you need to do in case you catch COVID-19?

### Deaths due to COVID-19 in Malaysia

Date	Total No. of Deaths	No. of Deaths	No. of Brought in Dead (BID)
01/10/2021	121	93	28
02/10/2021	109	76	33
03/10/2021	118	91	27
04/10/2021	76	61	15
05/10/2021	117	101	16
06/10/2021	105	79	26
07/10/2021	132	106	26
08/10/2021	78	55	23
09/10/2021	74	47	27
10/10/2021	64	50	14
11/10/2021	93	77	16
12/10/2021	103	77	26
13/10/2021	68	56	12
14/10/2021	88	66	22
15/10/2021	89	70	19
16/10/2021	88	62	26

Date	Total No. of Deaths	No. of Deaths	No. of Brought in Dead (BID)
17/10/2021	63	52	11
18/10/2021	72	63	9
19/10/2021	69	58	11
20/10/2021	76	62	14
21/10/2021	96	75	21
22/10/2021	78	61	17
23/10/2021	42	32	10
24/10/2021	48	36	12
25/10/2021	92	81	11
26/10/2021	84	64	20
27/10/2021	98	66	32
28/10/2021	95	71	24
29/10/2021	63	55	8
30/10/2021	44	40	4
31/10/2021	36	29	7
Total	2579 (100%)	2012 (78%)	567 (22%)

**Source: MOH** 

### Important tools to have if you are COVID-19 positive



# Oximeter to monitor oxygen level in your blood

If your oxygen level drop especially if below 90%, you MUST GO to hospital or CAC immediately

DO NOT TREAT AT HOME WITH OXYGEN CYLINDER



## Thermometer to monitor your temperature often.

If your temperature is spiking high especially over 39°C for a couple of days, you must go to the hospital or CAC to get advice

We wish to inform that there is **no medicine,**vitamins, supplements or herbs
that is proven 100% to cure or prevent COVID-19.

However, we can give recommendations on what you can do to mitigate the risk of COVID-19



### Our Recommendations

Supplements	For normal situation (per day)	For COVID-19 positive (per day for 7-10 days)
Vitamin C	1000 mg	3000mg
Vitamin D	1000 IU	3000 IU
Zinc	10-15 mg	75-100 mg
Povidone iodine (spray or gargle)	As required	3 times
Sea water nose spray	As required	3 times
Steaming	As required	3 times
Lingzhi mushroom standardized extract (50% polysaccharide min)	<del>-</del>	4 capsules of 550 mg
Quercetin (flavonoid)	_	3 X 800 mg
Cooling tea	As required	_
Herbal tea	_	As required

We are not claiming the above can prevent or cure COVID-19 but it may MITIGATE the risk of serious disease and catching COVID-19

## THANKYOU

http://www.soonsoongroup.com

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