ASIA COVID-19 STATISTICS

Presented By: Carine Tan, 22 Jan 2021

TABLE OF CONTENTS

Presentation Outline

PROJECT DEFINITION:

SCOPE

ASIA COVID-19 STATISTICS :
LIMITING THE SPREAD OF COVID-19 AND PREVENTING DEATH

EVALUATION CRITERIA

1. DETECTION
2. CONTAINMENT
3. TREATMENT

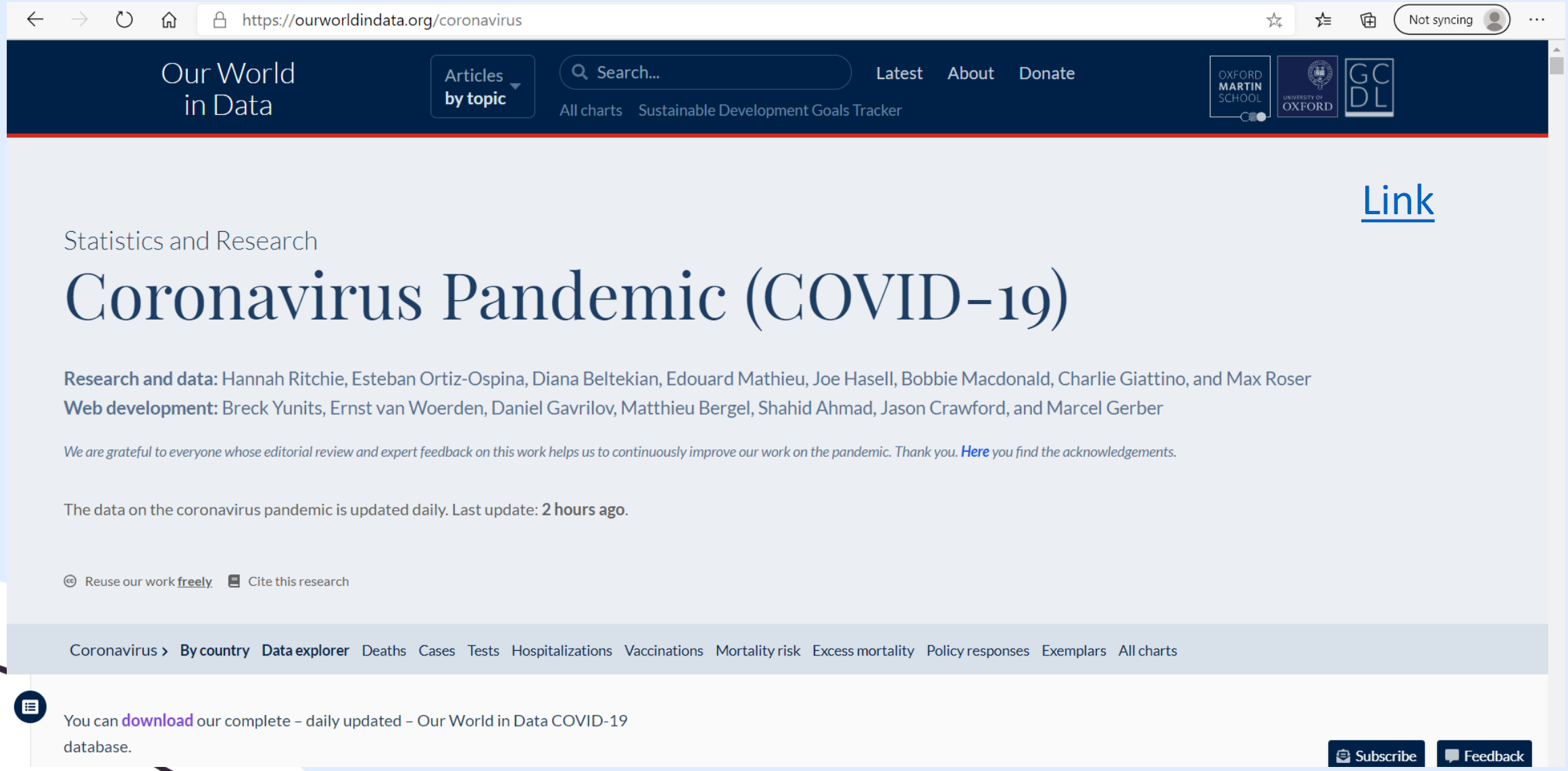
OBJECTIVE

- OVERALL TOP PERFORMING COUNTRIES
- OVERALL BOTTOM PERFORMING COUNTRIES

INTERESTED AUDIENCE

WORLD HEALTH ORGANIZATION

Data Source:


https://ourworldindata.org/coronavirus
Not syncing
Our World in Data
Articles by topic
Search...
Latest
About
Donate
All charts
Sustainable Development Goals Tracker
OXFORD MARTIN SCHOOL
UNIVERSITY OF OXFORD
GCDL
Link
Statistics and Research
Coronavirus Pandemic (COVID-19)
Research and data: Hannah Ritchie, Esteban Ortiz-Ospina, Diana Beltekian, Edouard Mathieu, Joe Hasell, Bobbie Macdonald, Charlie Giattino, and Max Roser
Web development: Breck Yunits, Ernst van Woerden, Daniel Gavrilov, Matthieu Bergel, Shahid Ahmad, Jason Crawford, and Marcel Gerber
We are grateful to everyone whose editorial review and expert feedback on this work helps us to continuously improve our work on the pandemic. Thank you. Here you find the acknowledgements.
The data on the coronavirus pandemic is updated daily. Last update: 2 hours ago.
Reuse our work freely
Cite this research
Coronavirus › By country Data explorer Deaths Cases Tests Hospitalizations Vaccinations Mortality risk Excess mortality Policy responses Exemplars All charts
You can download our complete – daily updated – Our World in Data COVID-19 database.
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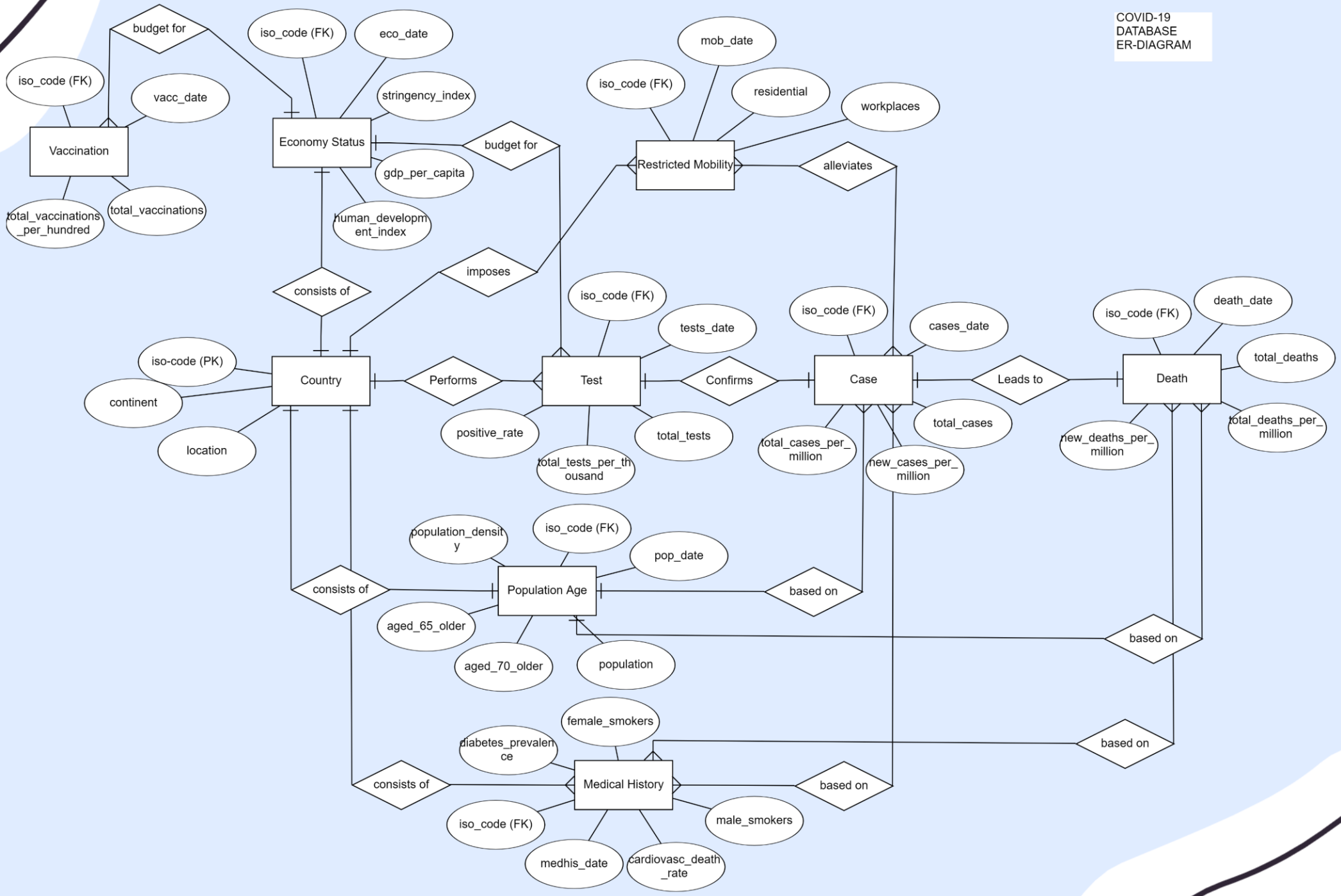
Feedback

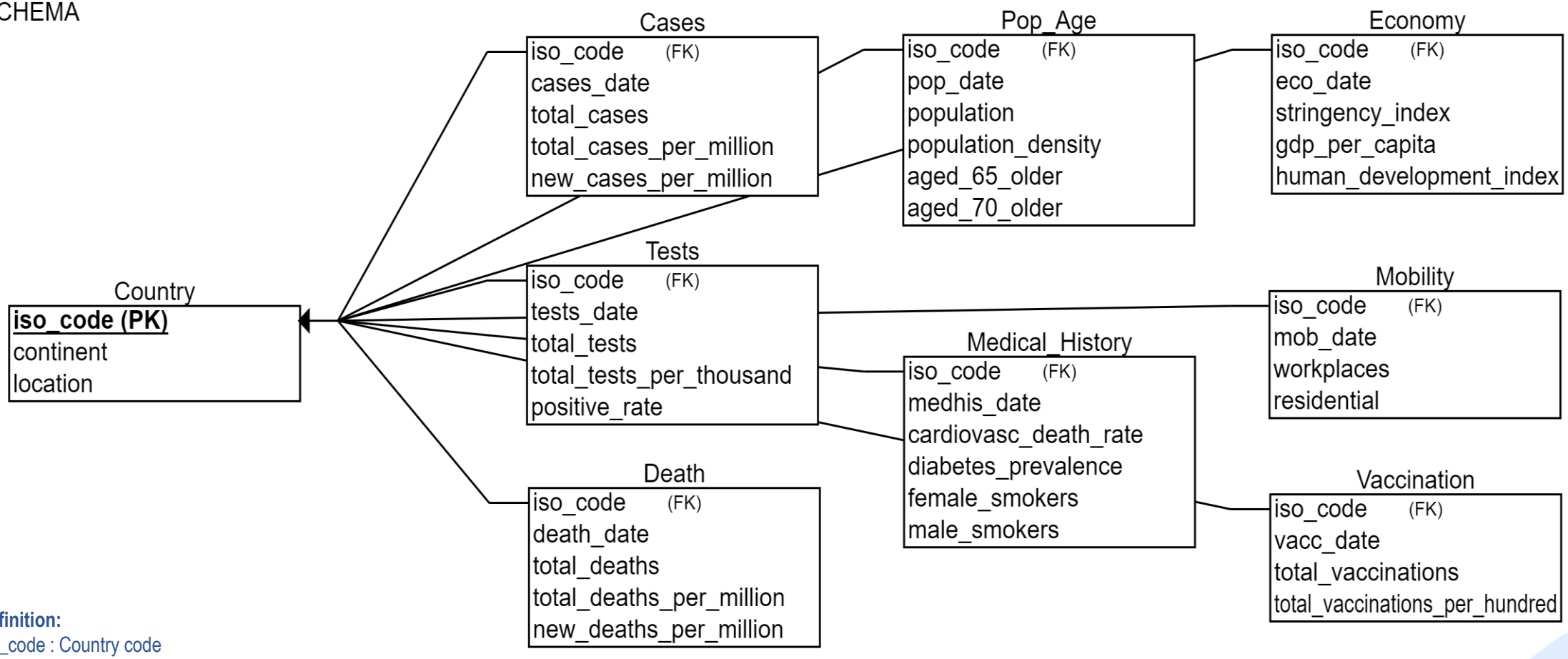
COVID-19
DATABASE
ER-DIAGRAM

ER DIAGRAM:



Schema:

COVID-19
DATABASE
SCHEMA



Definition:
iso_code : Country code
(*) per million : average of (*) per million people
Stringency_index : a higher index score indicates a higher level of stringency
Human_development_index : index of life expectancy, education and per capita income indicators

DATA PREPARATION & ANALYSIS IN SQL

DATA PREPARATION:

Name	Type	Size
changes-visitors-covid	Microsoft Excel Comma Separated Values File	2,681 KB
covid-stringency-index	Microsoft Excel Comma Separated Values File	1,975 KB
owid-covid-data	Microsoft Excel Comma Separated Values File	14,449 KB

World Data

```
Create Database "Covid-19";

use covid-19

--import owid-covid-data.csv as flat file (World data): [dbo].[owid-covid-data]
```

```
--delete world and international
select distinct iso_code from [dbo].[owid-covid-data];  --distinct list of countries
delete from [dbo].[owid-covid-data] where iso_code is null;  --delete international
delete from [dbo].[owid-covid-data] where iso_code = 'OWID_WRL'; --delete world

--create world-asia statistics
create view vwWorld_Asia as (
select [continent],sum([total_cases]) as SumtotCases,sum([total_deaths]) as SumtotDeaths,sum([po
where [date] = '2020-12-31'
group by [continent]);
select * from vwWorld_Asia;
```

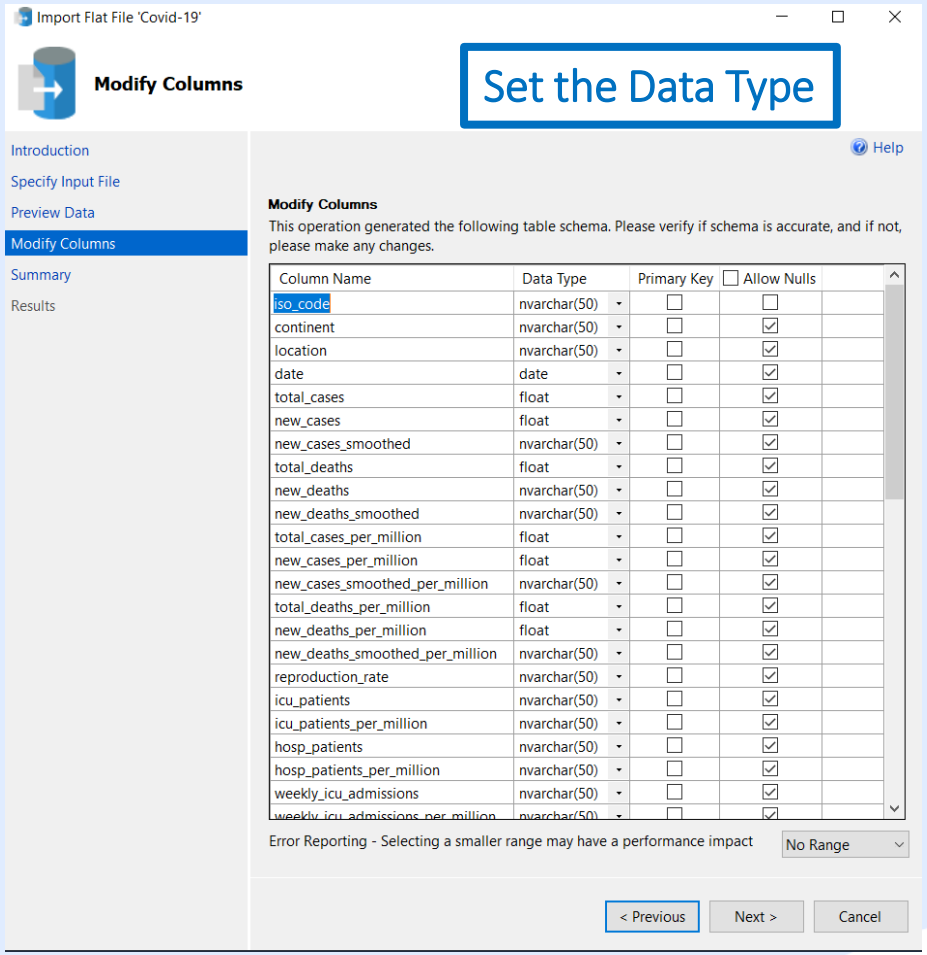
Asia Data

```
--narrow scope to ASIA
select * into [dbo].[owid-covid-data (ASIA)] from [dbo].[owid-covid-data]
where [continent] = 'ASIA';
```

```
--delete unwanted countries as they have many null entries
delete from [dbo].[owid-covid-data (ASIA)]
where iso_code in ('AFG','ARM','AZE','BRN','BTN','GEO','KGZ','KHM','LAO','LBN','MNG','OMN','PSE'

--delete Jan2021 records
delete from [dbo].[owid-covid-data] where year(date) = 2021;
delete from [dbo].[owid-covid-data (ASIA)] where year(date) = 2021;
```

Set the Data Type



DATA PREPARATION:

Create Tables from [dbo].[owid-covid-data (ASIA)]

```
--Create Table 'Country'
select distinct [iso_code],[continent],[location] into "Country"
from [dbo].[owid-covid-data (ASIA)];
--Set iso_code in Country table as Primary Key
alter table Country alter column iso_code nvarchar(50) not null;
alter table Country add primary key(iso_code);
select * from Country;

--Create Table 'Tests'
select [iso_code], [date] AS tests_date
      ,[total_tests]
      ,[total_tests_per_thousand]
      ,[positive_rate] into "Tests" from [dbo].[owid-covid-data (ASIA)];
select * from Tests;
drop table Tests;

ALTER TABLE Tests
ADD CONSTRAINT iso_code_fk FOREIGN KEY (iso_code)
REFERENCES country(iso_code);

--Create Table 'Cases'
select [iso_code],[date] AS cases_date
      ,[total_cases]
      ,[total_cases_per_million]
          ,[new_cases_per_million] into "Cases" from [dbo].[owid-covid-data (ASIA)];
drop table Cases;

--tabulate CFR: Case Fatality Rate as of Dec 2020
select c.[iso_code],month(d.[death_date]) as Month,100*(MAX(d.[total_deaths])/MAX(c.[total_cases])) as "CFR",max(d.[total_d
from Cases c join Death d
on c.[iso_code] = d.[iso_code] and c.[cases_date] = d.[death_date]
where month(d.[death_date]) = '12'
group by c.[iso_code], month(d.death_date)
order by c.[iso_code];
```

Update TWN population density

```
--update TWN populaton density, information obtained on google
update [dbo].[Pop_Age]
set [population_density] = '649'
where iso_code = ('TWN') and month(pop_date) = 12;
```

Create View to join columns from multiple Tables

```
create view vwScatterplots as
With temp_deccase as (
select [iso_code], Max([total_cases_per_million]) as DEC_totalcases from [dbo].[Cas
where month(cases_date) = '12'
group by [iso_code]),

temp_dectest as (
select [iso_code], MAX([total_tests_per_thousand]*1000) as DEC_totaltests from [dbo
where month(tests_date) = '12'
group by [iso_code]),

temp_decdeath as (
select [iso_code], MAX([total_deaths_per_million]) as DEC_totaldeath from [dbo].[De
where month(death_date) = '12'
group by [iso_code]),

temp_decpop as (
select [iso_code], avg(COALESCE([aged_65_older],[aged_70_older])) as DEC_totalpop,
where month(pop_date) = '12'
group by [iso_code]),

temp_medhist as (
select [iso_code], avg([cardiovasc_death_rate]) as Cardio
      ,avg([diabetes_prevalence]) as Diabetes
      ,avg([female_smokers]) as FSmoker
      ,avg([male_smokers]) as MSmoker from [dbo].[Med_His]
where month(MedHis_date) = '12'
group by [iso_code])

select dt.[iso_code], dc.DEC_totalcases,dt.[DEC_totaltests], dd.[DEC_totaldeath],dp
from temp_dectest dt join temp_deccase dc
on dt.[iso_code] = dc.[iso_code]
join temp_decdeath dd
on dd.[iso_code] = dc.[iso_code]
join temp_decpop dp
on dp.[iso_code] = dc.[iso_code]
join temp_medhist mh
on mh.[iso_code] = dc.[iso_code];
```

DATA PREPARATION:

```
--Create Table 'Country'
select distinct [iso_code],[continent],[location] into "Country"
from [dbo].[owid-covid-data (ASIA)];
--Set iso_code in Country table as Primary Key
alter table Country alter column iso_code nvarchar(50) not null;
alter table Country add primary key(iso_code);
select * from Country;

--Create Table 'Tests'
select [iso_code], [date] AS tests_date
      ,[total_tests]
      ,[total_tests_per_thousand]
      ,[positive_rate] into "Tests" from [dbo].[owid-covid-data (ASIA)];
select * from Tests;
drop table Tests;

ALTER TABLE Tests
ADD CONSTRAINT iso_code_fk FOREIGN KEY (iso_code)
REFERENCES country(iso_code);

--Create Table 'Cases'
select [iso_code],[date] AS cases_date
      ,[total_cases]
      ,[total_cases_per_million]
          ,[new_cases_per_million] into "Cases" from [dbo].[owid-covid-data (ASIA)];
drop table Cases;

--tabulate CFR: Case Fatality Rate as of Dec 2020
select c.[iso_code],month(d.[death_date]) as Month,100*(MAX(d.[total_deaths])/MAX(c.[total_cases])) as "CFR",max(d.[total_d
from Cases c join Death d
on c.[iso_code] = d.[iso_code] and c.[cases_date] = d.[death_date]
where month(d.[death_date]) = '12'
group by c.[iso_code], month(d.death_date)
order by c.[iso_code];
```

Create Tables from [dbo].[owid-covid-data (ASIA)]

- DDL, DML Commands : SELECT, UPDATE, ALTER
- Arithmetic Operators : *, /
- Comparison Operators : IN, IS NULL
- Column Aliases
- Logical Conditions : AND, OR, NOT
- Date Function : Month()
- Math Function : ROUND
- Control Flow Function : COALESCE
- Aggregate Functions : AVG, MAX
- Group By Clause
- Order By Clause
- Top Clause
- Create Views
- SQL Joins : INNER JOIN, LEFT JOIN

```
--updat
update
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create vie
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select [is
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group by [

temp_decte
select [is
where mont
group by [

temp_decde
select [is
where mont
group by [

temp_decpop as (
select [iso_code], avg(COALESCE([aged_65_older],[aged_70_older])) as DEC_totalpop,
where month(pop_date) = '12'
group by [iso_code]),

temp_medhist as (
select [iso_code], avg([cardiovasc_death_rate]) as Cardio
      ,avg([diabetes_prevalence]) as Diabetes
      ,avg([female_smokers]) as FSmoker
      ,avg([male_smokers]) as MSmoker from [dbo].[Med_His]
where month(MedHis_date) = '12'
group by [iso_code])

select dt.[iso_code], dc.DEC_totalcases,dt.[DEC_totaltests], dd.[DEC_totaldeath],dp
from temp_dectest dt join temp_deccase dc
on dt.[iso_code] = dc.[iso_code]
join temp_decdeath dd
on dd.[iso_code] = dc.[iso_code]
join temp_decpop dp
on dp.[iso_code] = dc.[iso_code]
join temp_medhist mh
on mh.[iso_code] = dc.[iso_code];
```

Create View to join columns from multiple Tables

DATA PREPARATION:

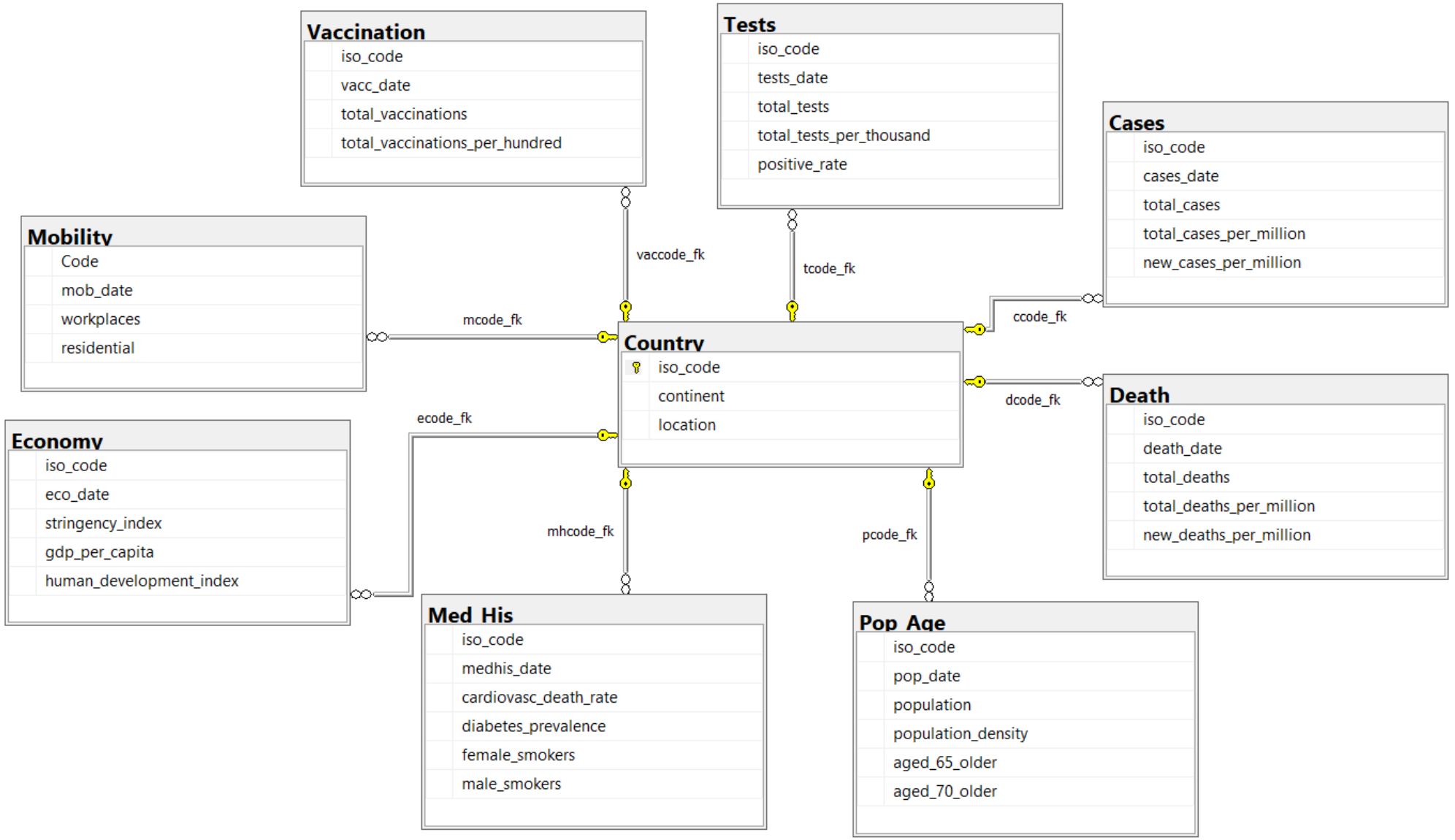
Import covid-stringency-index
& changes-visitors-covid.csv

- DDL, DML Commands
- Arithmetic Operators : *, /
- Comparison Operators : IN, IS NULL
- Column Aliases
- Logical Conditions : AND, OR, NOT
- Date Function : Month()
- Math Function : ROUND
- Control Flow Function : COALESCE
- Aggregate Functions : AVG, MAX
- Group By Clause
- Order By Clause
- Top Clause
- SQL Joins : INNER JOIN, LEFT JOIN
- Create Views

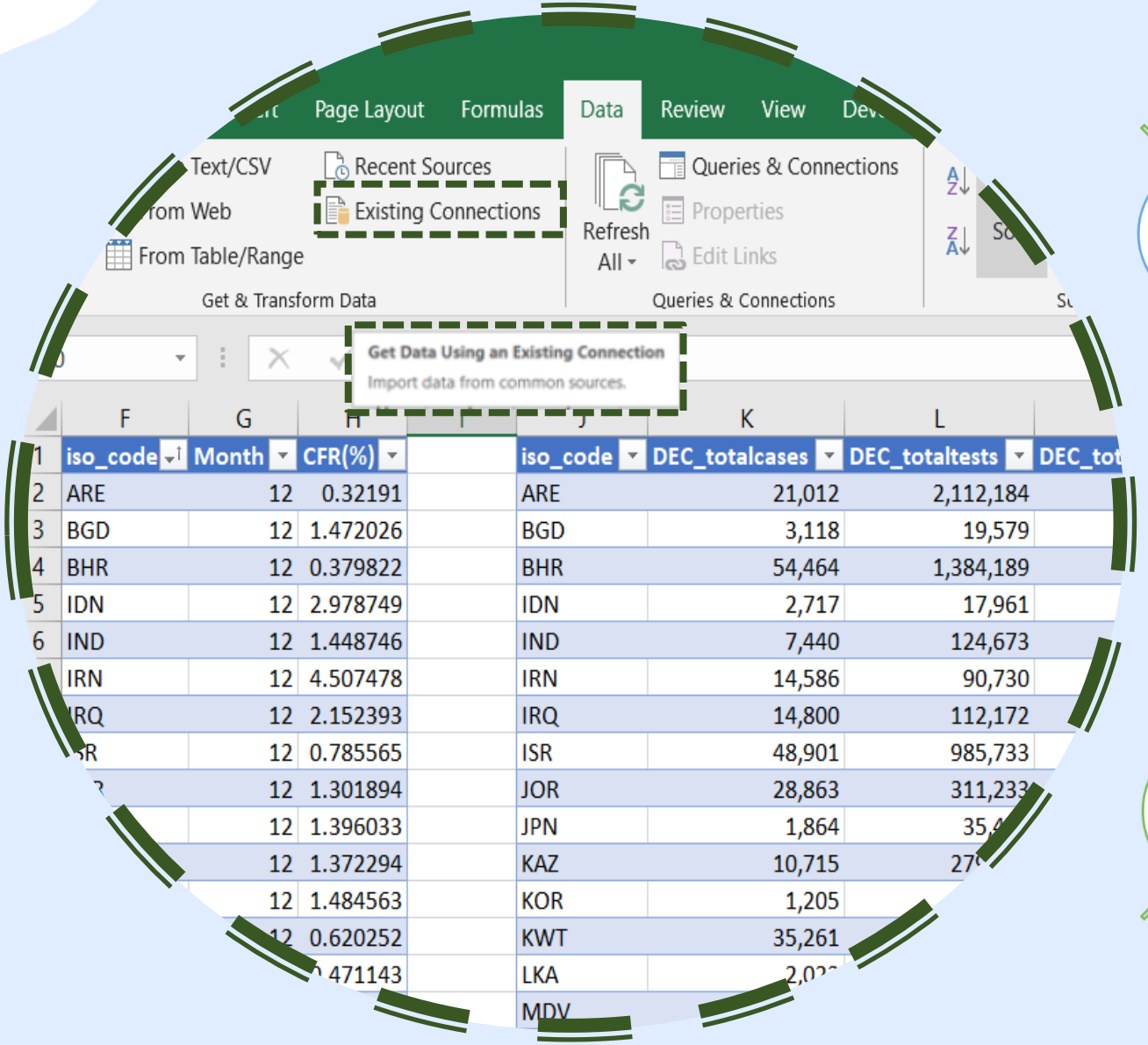
```
use [Covid-19]

--import covid-stringency-index.csv file
--Create Table 'Economy'
select e.[iso_code], e.[date] AS eco_date
      ,s.[stringency_index]
      ,e.[gdp_per_capita]
      ,e.[human_development_index] into "Economy"
from [dbo].[owid-covid-data (ASIA)] e LEFT JOIN [dbo].[covid-stringency-index] s
on e.[iso_code] = s.[Code] and e.[date] = s.[date];

--update TWN hdi (2016 estimate), infor obtained on wikipedia: https://simple.wikipedia.org/wiki/L
--update TWN gdp per capital (2020 estimate): https://www.ceicdata.com/en/indicator/taiwan/forecas
update [dbo].[Economy]
set [human_development_index] = '0.866'
where iso_code = ('TWN');
update [dbo].[Economy]
set [gdp_per_capita] = '54019.882'
where iso_code = ('TWN');

select * from Economy;
drop table Economy;

--Create Table 'Vaccination'
select [iso_code],[date] AS vacc_date
      ,[total_vaccinations]
          ,[total_vaccinations_per_hundred] into "Vaccination" from [dbo].[owid-covid-data (ASIA)_2021];
--remove null rows
delete from Vaccination where [total_vaccinations] is null and [total_vaccinations_per_hundred] is null;
```

```
--import changes-visitors-covid.csv file
--Create Table 'Mobility'
select [Code],[Date] AS mob_date
      ,[workplaces]
      ,[residential] into "Mobility" from [dbo].[changes-visitors-covid]
where [Code] in ('ARE','BGD','BHR','IDN','IND','IRN','IRQ','ISR','JOR','JPN','KAZ','KOR','KWT',
'QAT','SAU','SGP','THA','TUR','TWN','VNM');
--remove null rows
delete from Mobility where [workplaces] is null and [residential] is null;
```

SSMS DB DIAGRAM:



DATA PREPARATION:



	F	G	H	J	K	L
1	iso_code	Month	CFR(%)	iso_code	DEC_totalcases	DEC_totaltests
2	ARE	12	0.32191	ARE	21,012	2,112,184
3	BGD	12	1.472026	BGD	3,118	19,579
4	BHR	12	0.379822	BHR	54,464	1,384,189
5	IDN	12	2.978749	IDN	2,717	17,961
6	IND	12	1.448746	IND	7,440	124,673
	IRN	12	4.507478	IRN	14,586	90,730
	IRQ	12	2.152393	IRQ	14,800	112,172
	SR	12	0.785565	ISR	48,901	985,733
		12	1.301894	JOR	28,863	311,233
		12	1.396033	JPN	1,864	35,4
		12	1.372294	KAZ	10,715	27(
		12	1.484563	KOR	1,205	
		12	0.620252	KWT	35,261	
			471143	LKA	2,02	
				MDV		

Data: SQL into Excel

Insert Pivot Tables

Plot Charts

Create Dashboard

DATA ANALYSIS IN SQL:

AS OF DECEMEBER 2020

Top 5 & Bottom 5
1. Total Tests per million
2. Avg Positive Rate
3. Avg New Cases per million
4. Case Fatality Rate (CFR) %
5. Avg New Deaths per million

DETECTION :

	iso_code	Top5 Dec_totaltests
1	ARE	2112184
2	BHR	1384189
3	ISR	985733
4	SGP	927527
5	MDV	582008

	iso_code	Bott5 Dec_totaltests
1	TWN	5332
2	VNM	15101
3	IDN	17961
4	BGD	19579
5	THA	23181

	iso_code	Top5 Dec_AVGpostiverate
1	IRN	0.2
2	IDN	0.19
3	TUR	0.14
4	NPL	0.14
5	JOR	0.13

	iso_code	Bott5 Dec_AVGpostiverate
1	SGP	0.00029
2	SAU	0.00487
3	THA	0.00748
4	ARE	0.00929
5	TWN	0.01116

CONTAINMENT :

	iso_code	Top5 Dec_AVGtotalcases
1	ISR	320.78
2	TUR	295.07
3	JOR	237.32
4	ARE	127.08
5	BHR	108.42

	iso_code	Bott5 Dec_AVGtotalcases
1	VNM	0.04
2	TWN	0.17
3	THA	1.46
4	SGP	2.1
5	SAU	4.99

TREATMENT :

Results | Messages

	iso_code	Month	Top5 CFR
1	IRN	12	4.50747750056728
2	IDN	12	2.97874859727825
3	VNM	12	2.38907849829352
4	IRQ	12	2.15239269533724
5	MMR	12	2.15196983069887

	iso_code	Month	Bott5 CFR
1	SGP	12	0.0494888991279715
2	QAT	12	0.170335247577068
3	ARE	12	0.321910096139966
4	MDV	12	0.348913280511739
5	BHR	12	0.379821958456973

	iso_code	Top5 Dec_AVGtotaldeaths
1	JOR	3.42
2	TUR	2.73
3	IRN	2.68
4	ISR	1.69
5	IDN	0.61

	iso_code	Bott5 Dec_AVGtotaldeaths
1	VNM	0
2	SGP	0
3	THA	0
4	TWN	0
5	QAT	0.09

DATA ANALYSIS IN SQL:

AS OF DECEMEBER 2020

Top 5 & Bottom 5
1. Total Tests per million
2. Avg Positive Rate
3. Avg New Cases per million
4. Case Fatality Rate (CFR) %
5. Avg New Deaths per million

CFR TOP5 & BOTTOM5

```
--Top 5 CFR(%) as of December 2020
select top 5 c.[iso_code],month(d.[death_date]) as Month,100*(max(d.[total_deaths])/
from Cases c join Death d
on c.[iso_code] = d.[iso_code] and c.[cases_date] = d.[death_date]
where month(d.[death_date]) = '12'
group by c.[iso_code], month(d.death_date)
order by "Top5 CFR" desc;

--Bottom 5 CFR(%) as of December 2020
select top 5 c.[iso_code],month(d.[death_date]) as Month,100*(max(d.[total_deaths])/max(c.[total_cases])) as "Bott5 CFR"
from Cases c join Death d
on c.[iso_code] = d.[iso_code] and c.[cases_date] = d.[death_date]
where month(d.[death_date]) = '12'
group by c.[iso_code], month(d.death_date)
order by "Bott5 CFR";
```

Total Tests per million
TOP5 & BOTTOM5

```
--Top 5 Total Tests per million as of December 2020
select top 5 [iso_code], round(MAX(total_tests_per_million),0) as "Top5 Dec_totaltests"
from vwCase_Tests_Timeline
where month(cases_date) = '12'
group by [iso_code]
order by "Top5 Dec_totaltests" DESC;

--Bottom 5 Total Tests per million as of December 2020
select top 5 [iso_code], round(MAX(total_tests_per_million),0) as "Bott5 Dec_totaltests"
from vwCase_Tests_Timeline
where month(cases_date) = '12'
group by [iso_code]
order by "Bott5 Dec_totaltests";
```

DATA ANALYSIS IN SQL:

AS OF DECEMEBER 2020

AVG New Cases per million
TOP5 & BOTTOM5

```
--Top 5 AVG Total New Cases per million in December 2020
select top 5 [iso_code], round(AVG(new_cases_per_million),2) as "Top5 Dec_AVGtotalcases"
from vwCase_Tests_Timeline
where month(cases_date) = '12'
group by [iso_code]
order by "Top5 Dec_AVGtotalcases" DESC;

--Bottom 5 AVG Total New Cases per million in December 2020
select top 5 [iso_code], round(AVG(new_cases_per_million),2) as "Bott5 Dec_AVGtotalcases"
from vwCase_Tests_Timeline
where month(cases_date) = '12'
group by [iso_code]
order by "Bott5 Dec_AVGtotalcases";
```

AVG New Deaths per million
TOP5 & BOTTOM5

```
--Top 5 AVG Total New Deaths per million in December 2020
select top 5 [iso_code], round(AVG(new_deaths_per_million),2) as "Top5 Dec_AVGtotaldeaths"
from vwCase_Tests_Timeline
where month(cases_date) = '12'
group by [iso_code]
order by "Top5 Dec_AVGtotaldeaths" DESC;

--Bottom 5 AVG Total New Deaths per million in D
select top 5 [iso_code], round(AVG(new_deaths_pe
from vwCase_Tests_Timeline
where month(cases_date) = '12'
group by [iso_code]
order by "Bott5 Dec_AVGtotaldeaths";
```

AVG Positive Rate
TOP5 & BOTTOM5

```
--Top 5 AVG Positive rate in December 2020
select top 5 [iso_code], round(AVG(positive_rate),2) as "Top5 Dec_AVGpostiverate"
from vwCase_Tests_Timeline
where month(cases_date) = '12'
group by [iso_code]
order by "Top5 Dec_AVGpostiverate" DESC;

--Bottom 5 AVG Positive rate in December 2020
select top 5 [iso_code], round(AVG(positive_rate),5) as "Bott5 Dec_AVGpostiverate"
from vwCase_Tests_Timeline
where month(cases_date) = '12'
group by [iso_code]
having round(AVG(positive_rate),5)  is not null
order by "Bott5 Dec_AVGpostiverate";
```

DATA ANALYSIS IN SQL:

Top 5 & Bottom 5
1. Total Tests per million
2. Avg Positive Rate
3. Avg New Cases per million
4. Case Fatality Rate (CFR) %
5. Avg New Deaths per million

AS OF DECEMEBER 2020

DETECTION :

	iso_code	Top5 Dec_totaltests
1	ARE	2112184
2	BHR	1384189
3	ISR	985733
4	SGP	927527
5	MDV	582008

	iso_code	Bott5 Dec_totaltests
1	TWN	5332
2	VNM	15101
3	IDN	17961
4	BGD	19579
5	THA	23181

	iso_code	Top5 Dec_AVGpostiverate
1	IRN	0.2
2	IDN	0.19
3	TUR	0.14
4	NPL	0.14
5	JOR	0.13

	iso_code	Bott5 Dec_AVGpostiverate
1	SGP	0.00029
2	SAU	0.00487
3	THA	0.00748
4	ARE	0.00929
5	TWN	0.01116

- Overall TOP performing countries :
  SGP, SAU, THA, VNM, TWN
- Overall BOTTOM performing countries :
  IRN, IDN, TUR, JOR, ISR

CONTAINMENT :

	iso_code	Top5 Dec_AVGtotalcases
1	ISR	320.78
2	TUR	295.07
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TREATMENT :

Results | Messages

	iso_code	Month	Top5 CFR
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	iso_code	Month	Bott5 CFR
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	iso_code	Top5 Dec_AVGtotaldeaths
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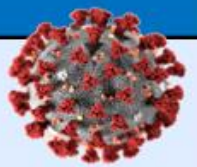
3	IRN	2.68
4	ISR	1.69
5	IDN	0.61

	iso_code	Bott5 Dec_AVGtotaldeaths
1	VNM	0
2	SGP	0
3	THA	0
4	TWN	0
5	QAT	0.09

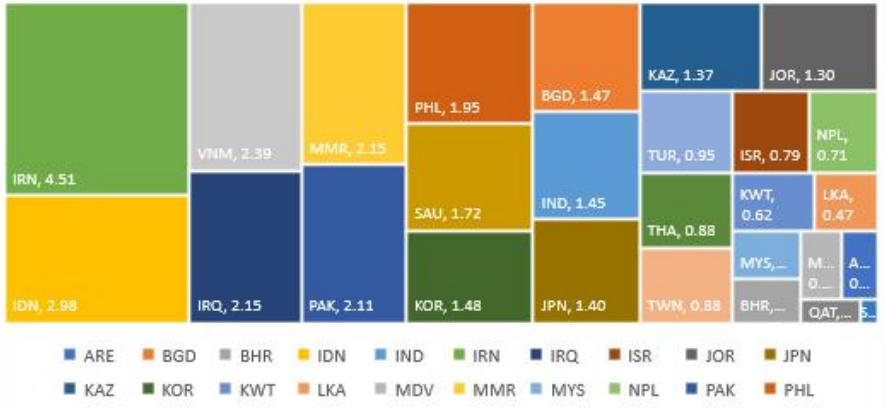
DASHBOARDS!

DASHBOARD 1:

ASIA COVID-19 STATISTICS (updated 2020-12-31)

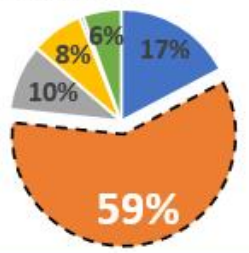


Top 20 Case Fatality Rate (%)

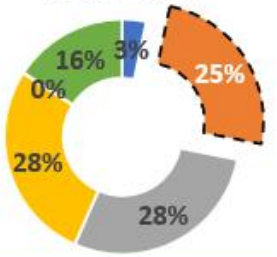


Population	Total Cases	Total Deaths
4,599,891,093	20,695,037	337,412

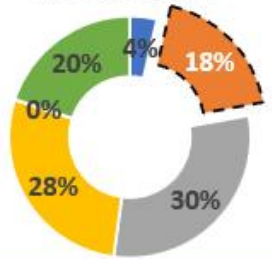
World Population



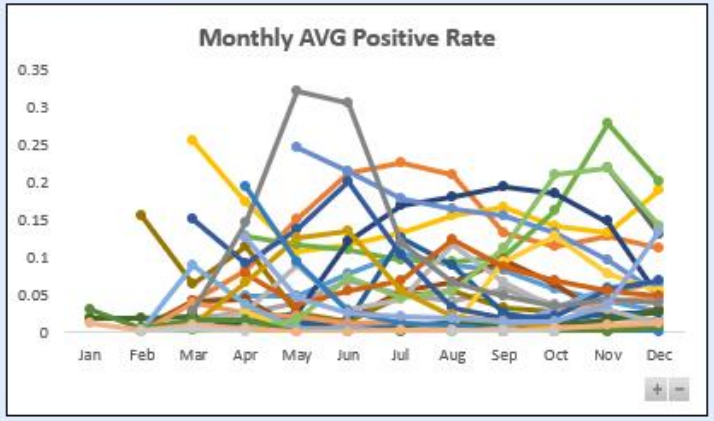
Total Cases

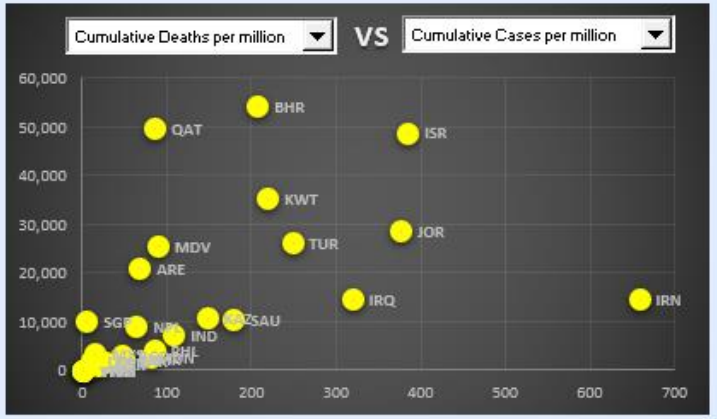


Total Deaths

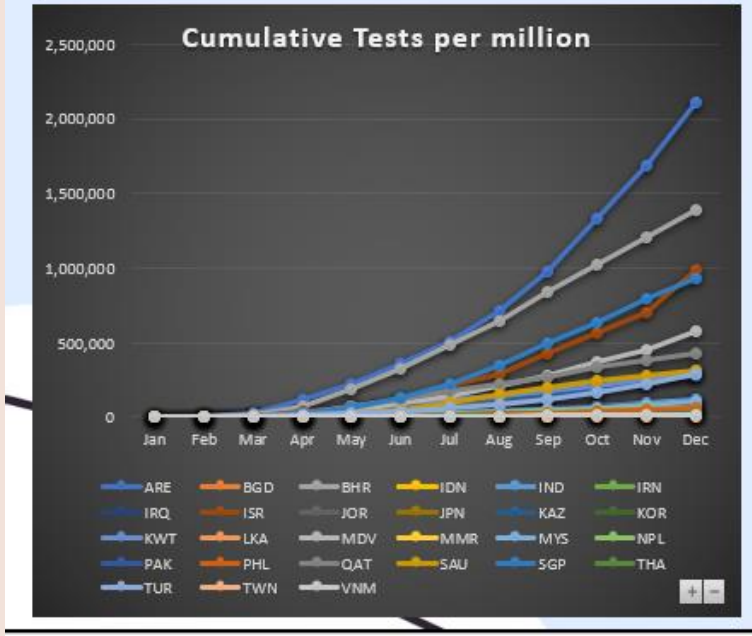


Monthly AVG Positive Rate

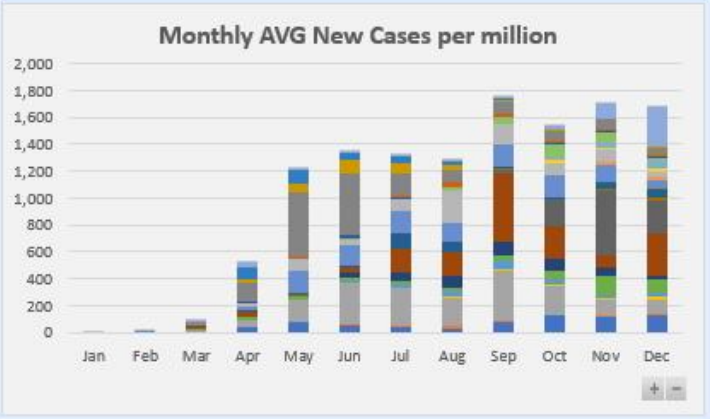




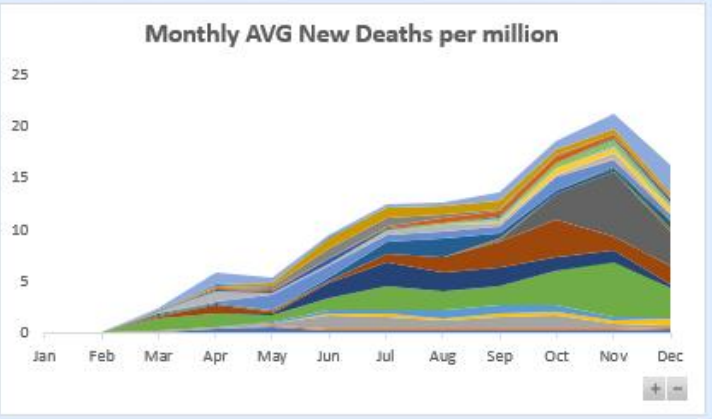
Cumulative Tests per million



Monthly AVG New Cases per million

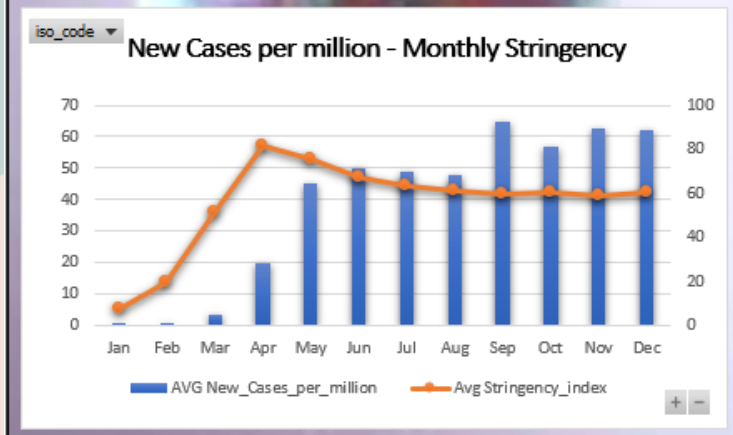


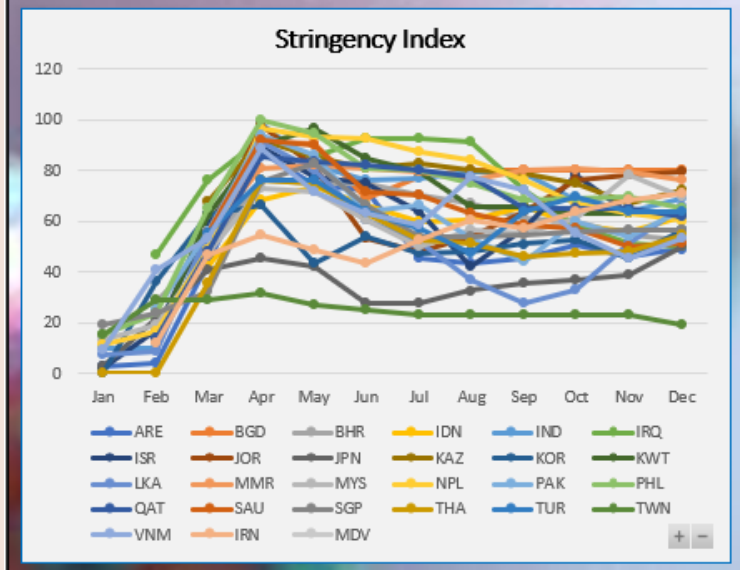
Monthly AVG New Deaths per million

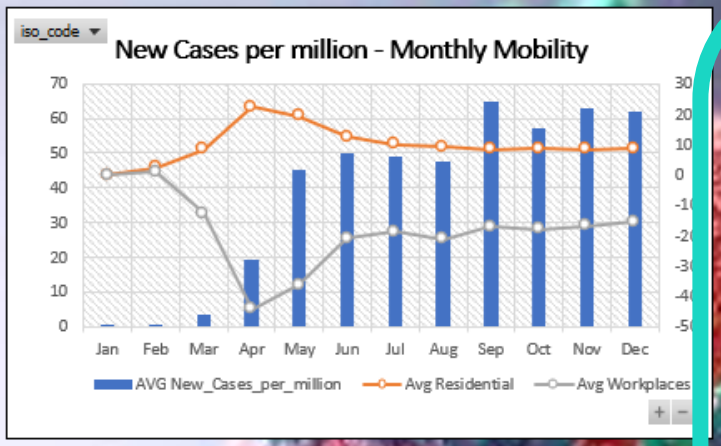


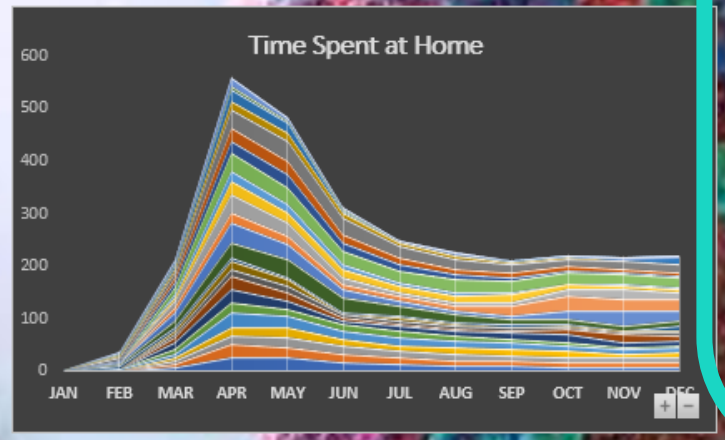
ASIA COVID-19 STATISTICS (updated 2020-12-31)

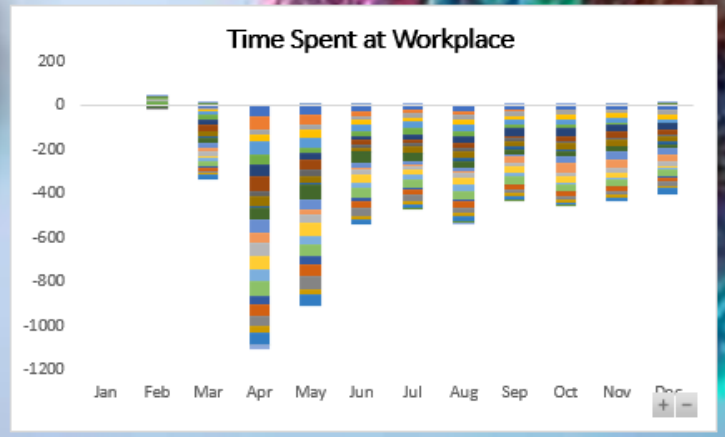
DASHBOARD 2:

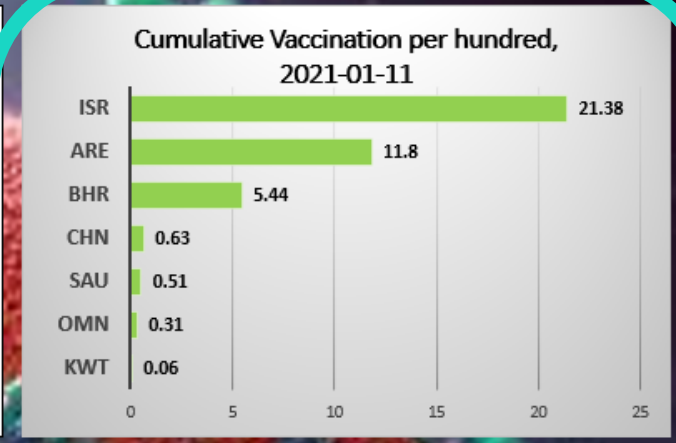


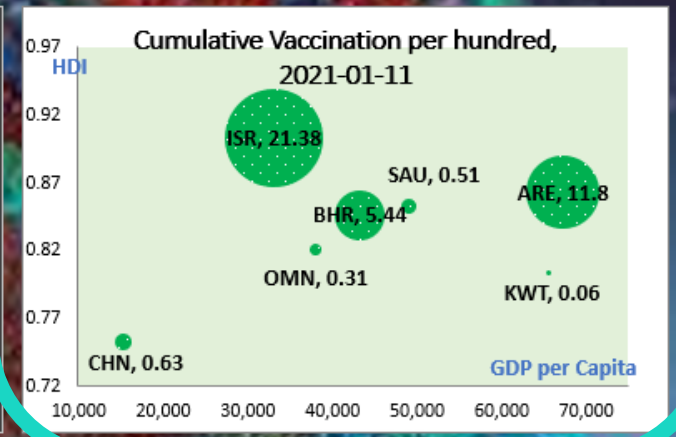


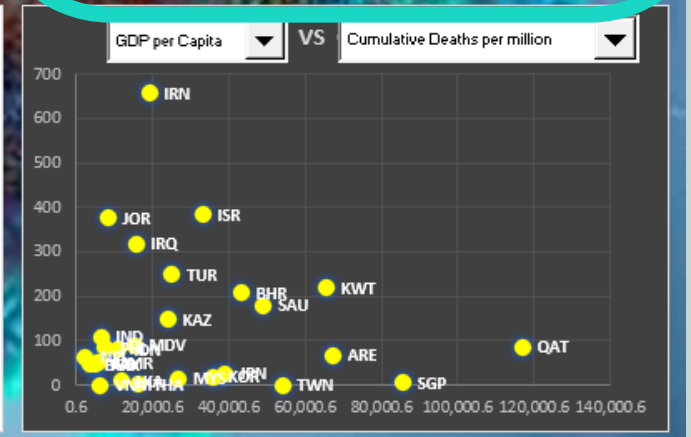












INSIGHTS!

DASHBOARD 1 INSIGHTS :

ASIA COVID-19 STATISTICS (updated 2020-12-31)

Population	Total Cases	Total Deaths
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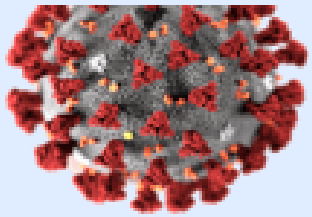
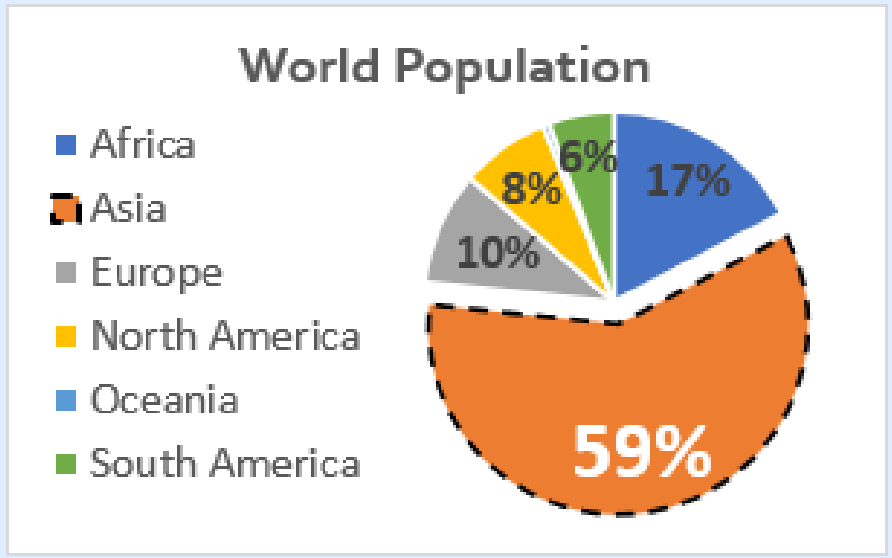
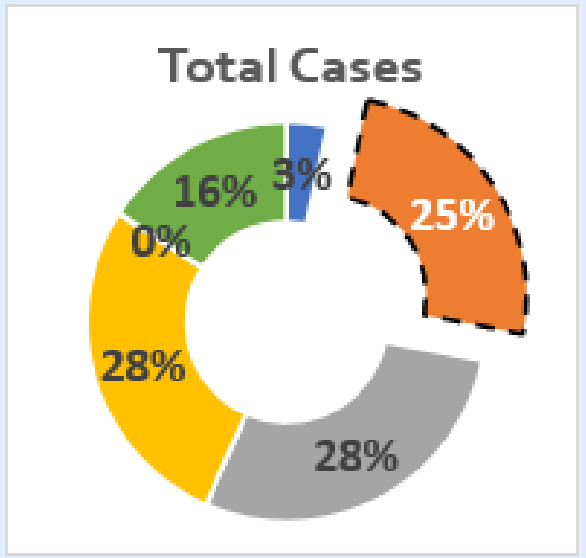
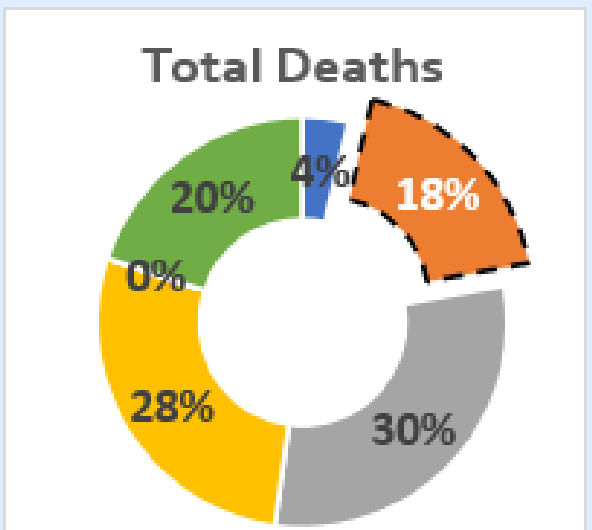


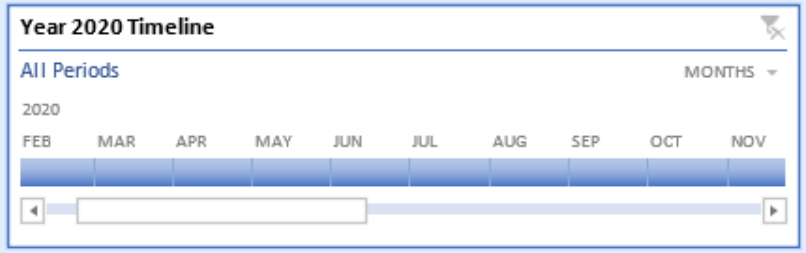


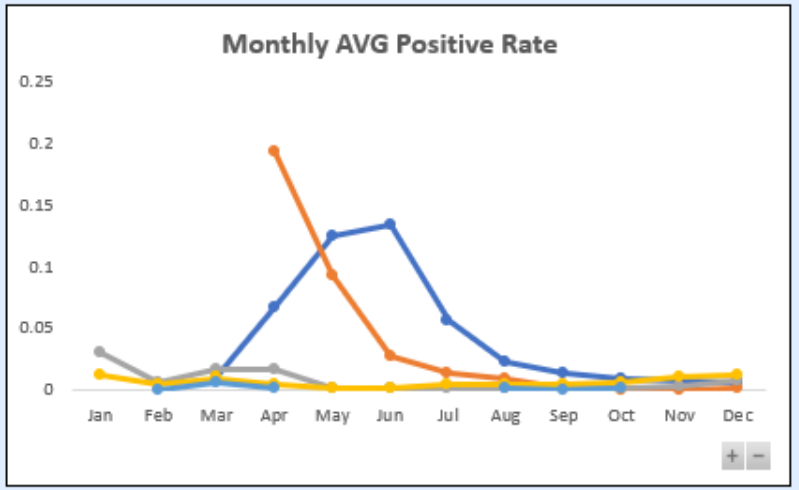


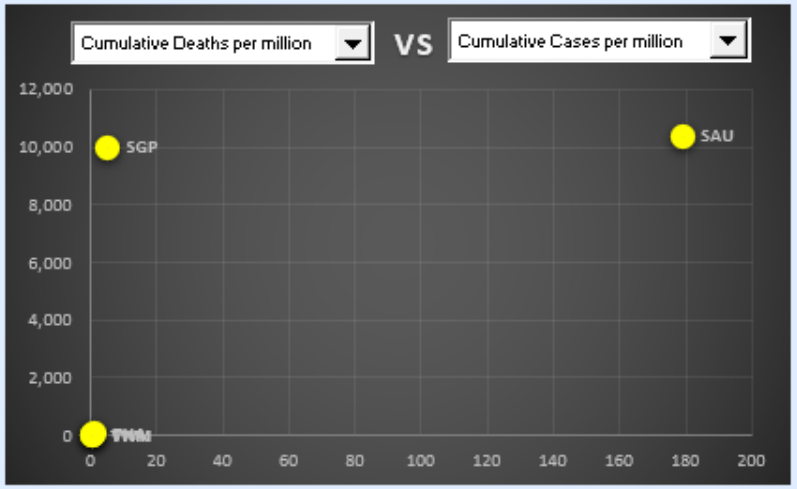


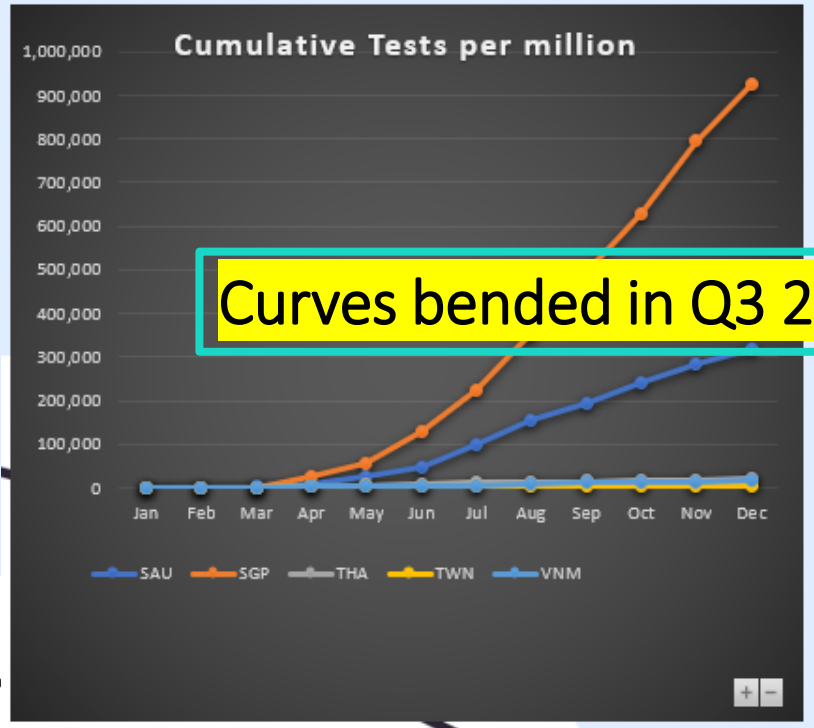
DASHBOARD 1 INSIGHTS :

Overall TOP Performing Countries : SGP, SAU, THA, VNM, TWN

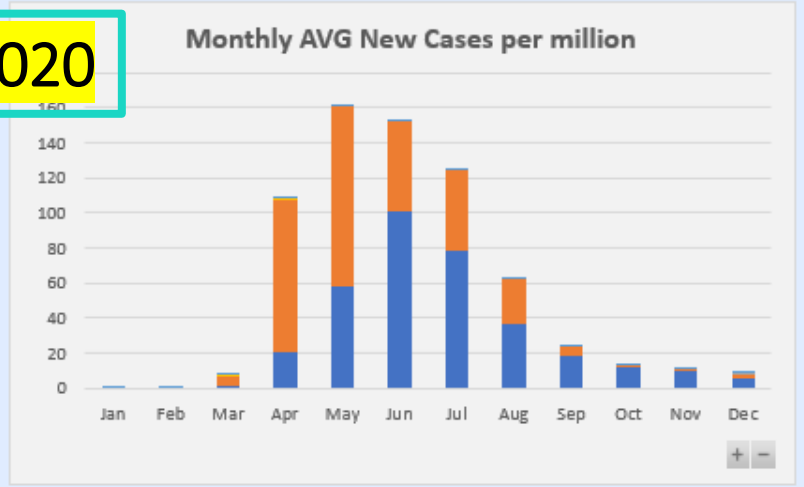


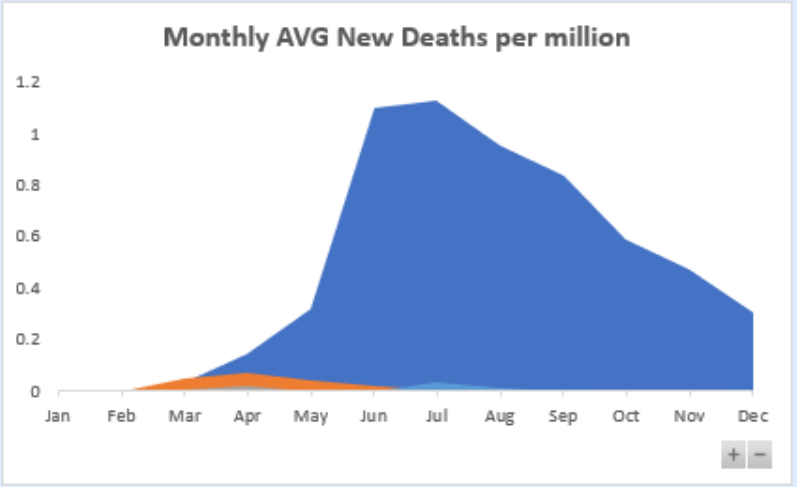






Curves bended in Q3 2020

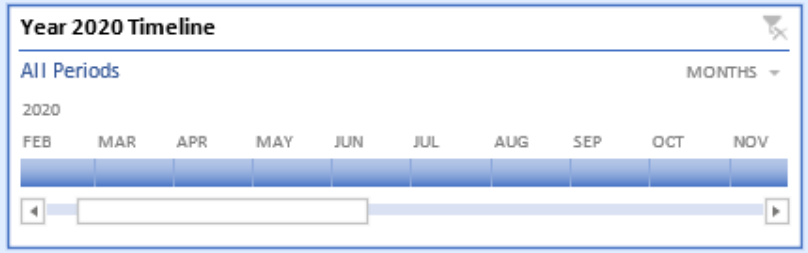


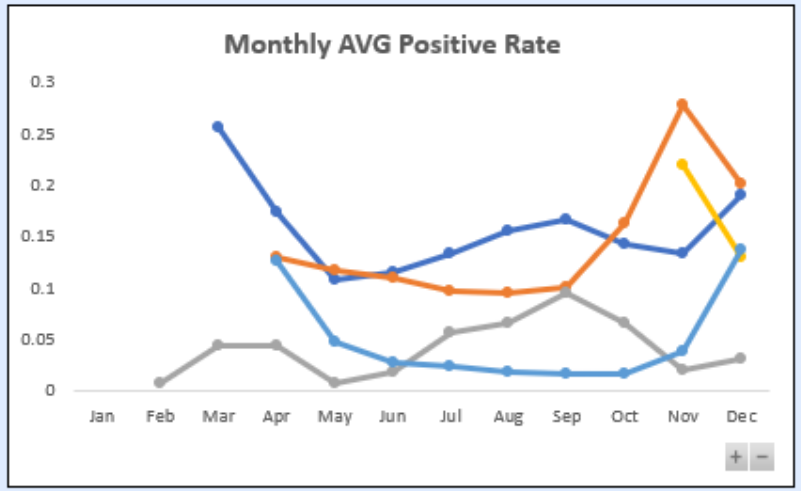


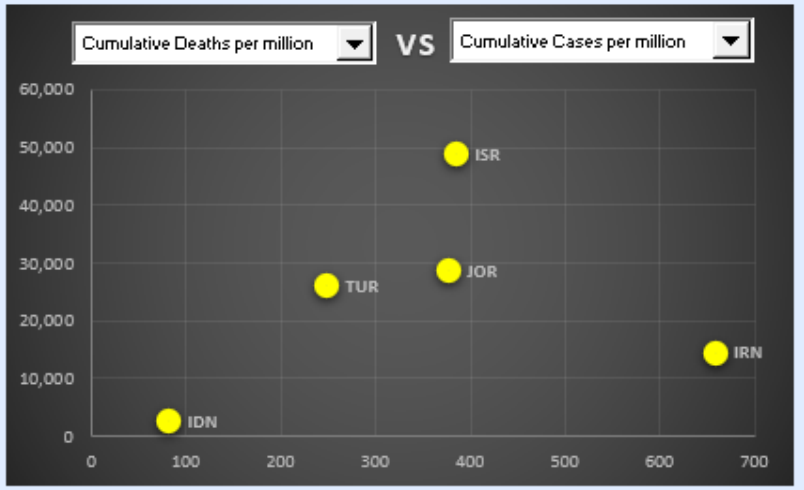
Additional Resource: Thailand, Taiwan

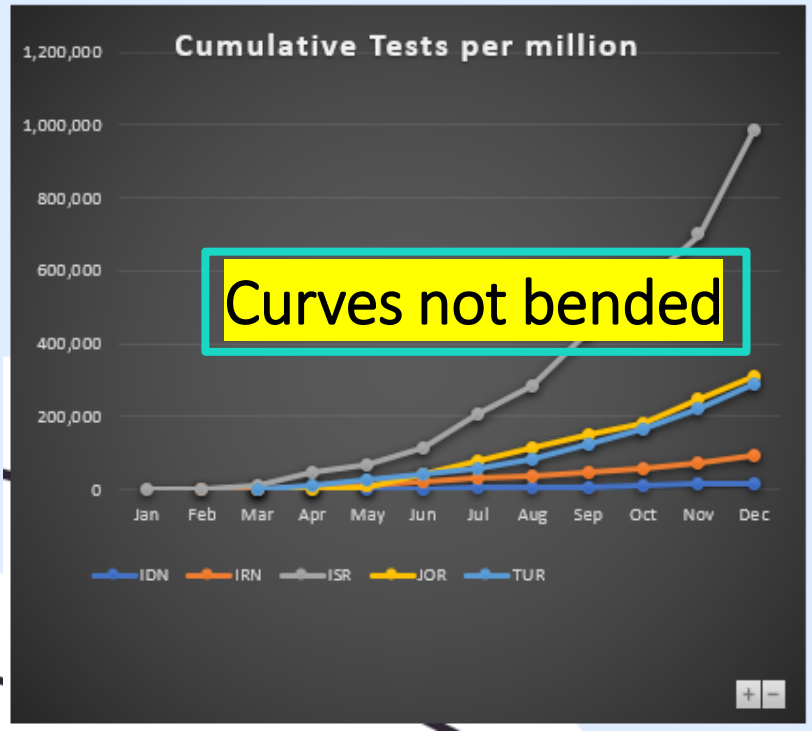
DASHBOARD 1 INSIGHTS :

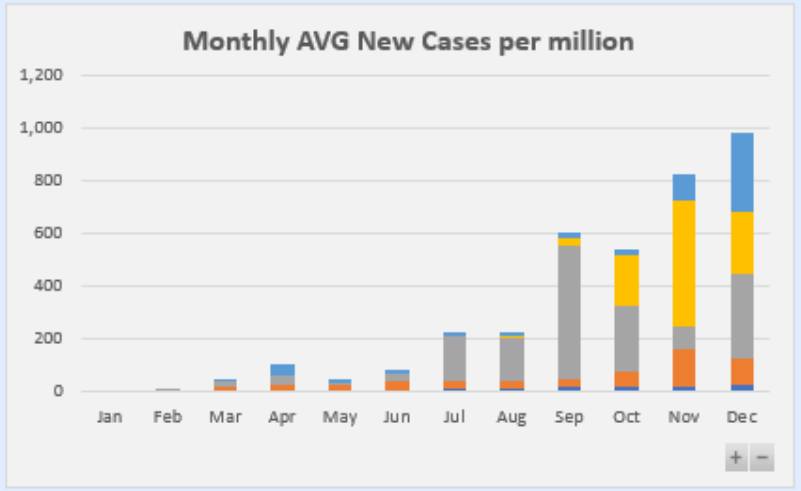
Overall BOTTOM Performing Countries : IRN, IDN, TUR, JOR, ISR

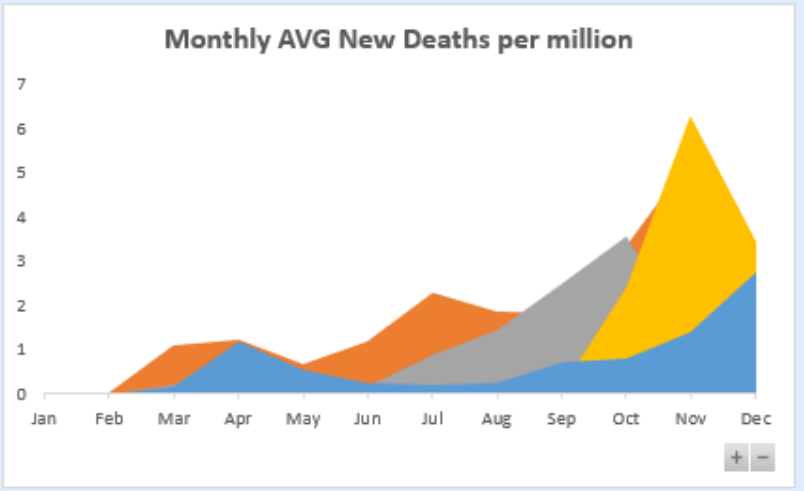








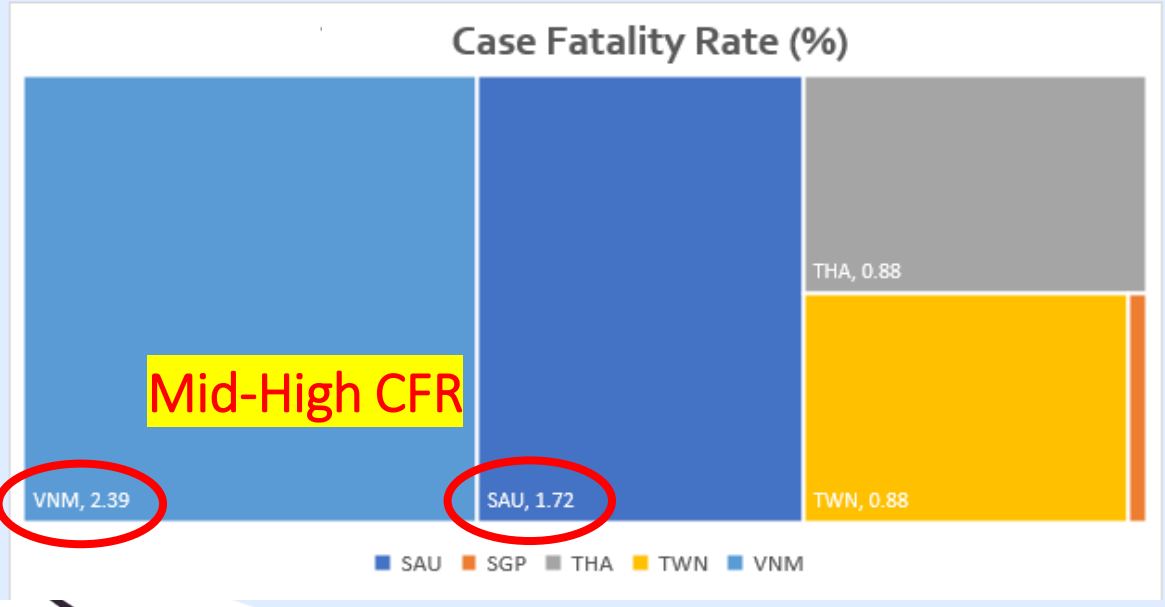




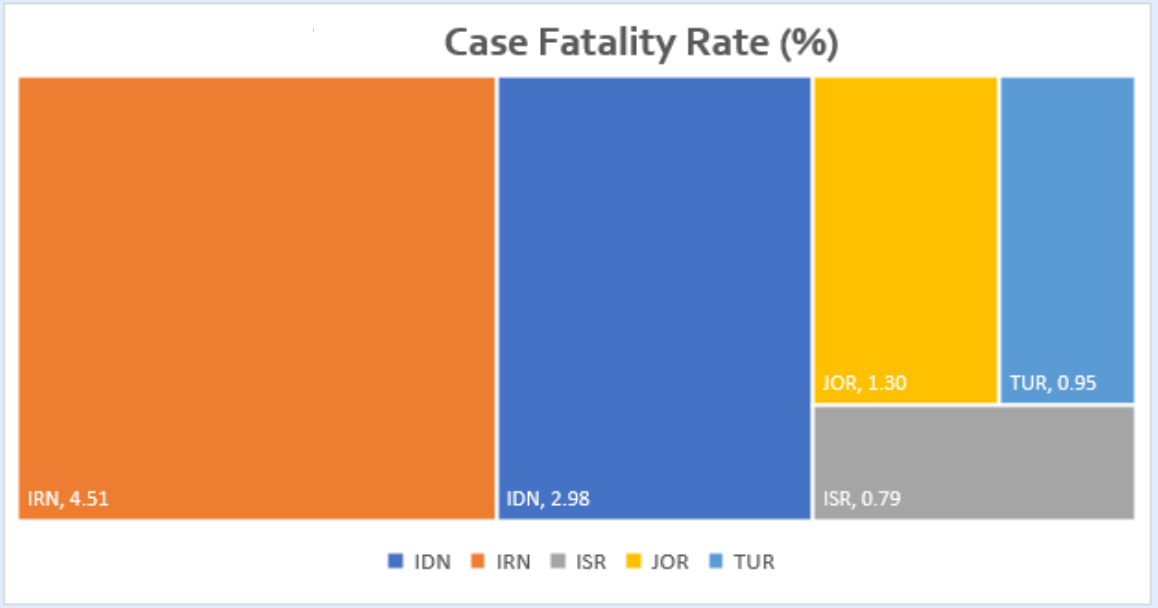
DASHBOARD 1 INSIGHTS :

$$\text{Coronavirus Case Fatality Rate} = \frac{\text{Number of people who die from coronavirus}}{\text{Number of people who test positive for coronavirus}} * 100 = \text{Case Fatality Rate expressed as a percentage}$$

Overall TOP Performing Countries:

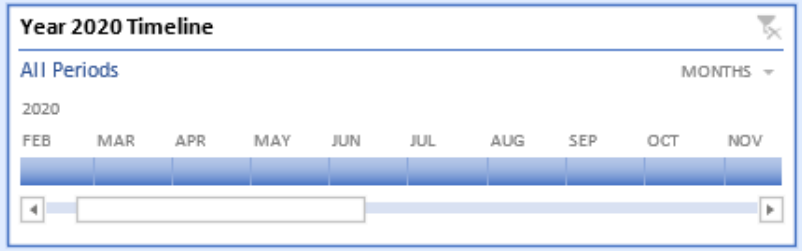


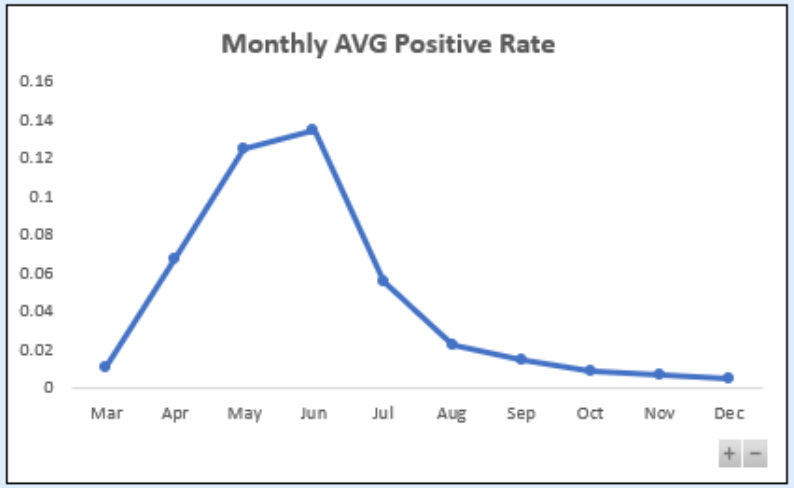
Overall BOTTOM Performing Countries :

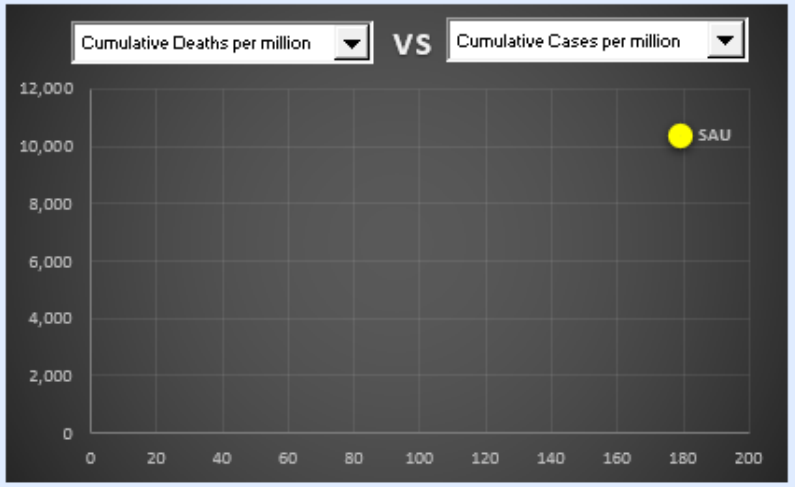


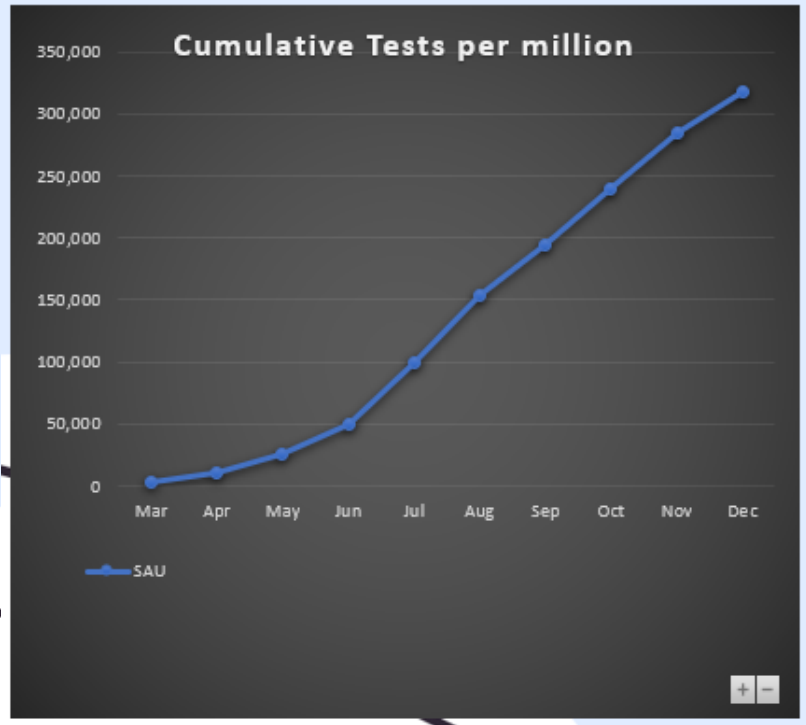
DASHBOARD 1 INSIGHTS :

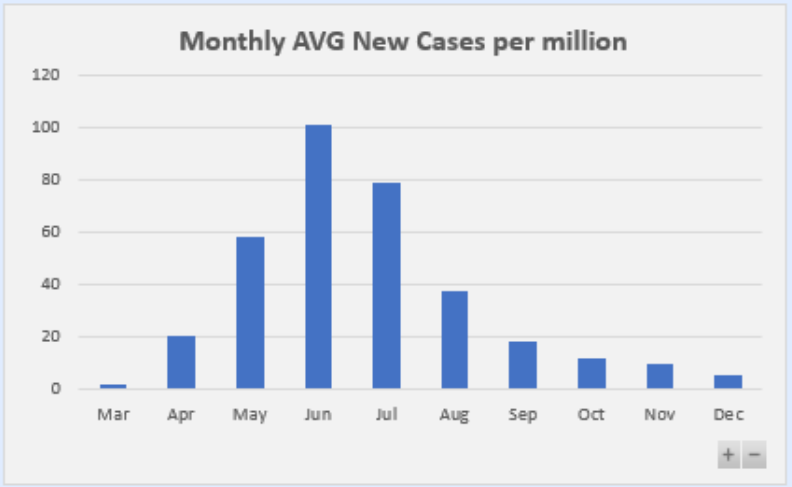
SAU & VNM have mid-high CFR(%): BUT their New Cases & New Deaths figures are relatively small, curves bended in Q3 2020 and have stayed low.

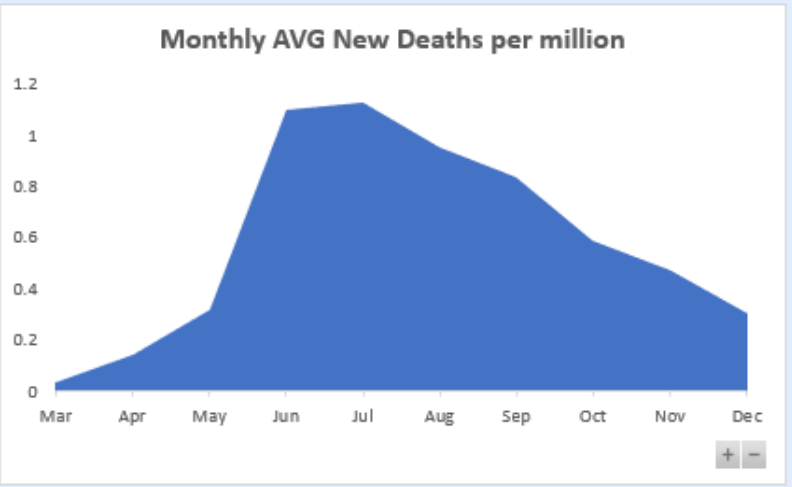






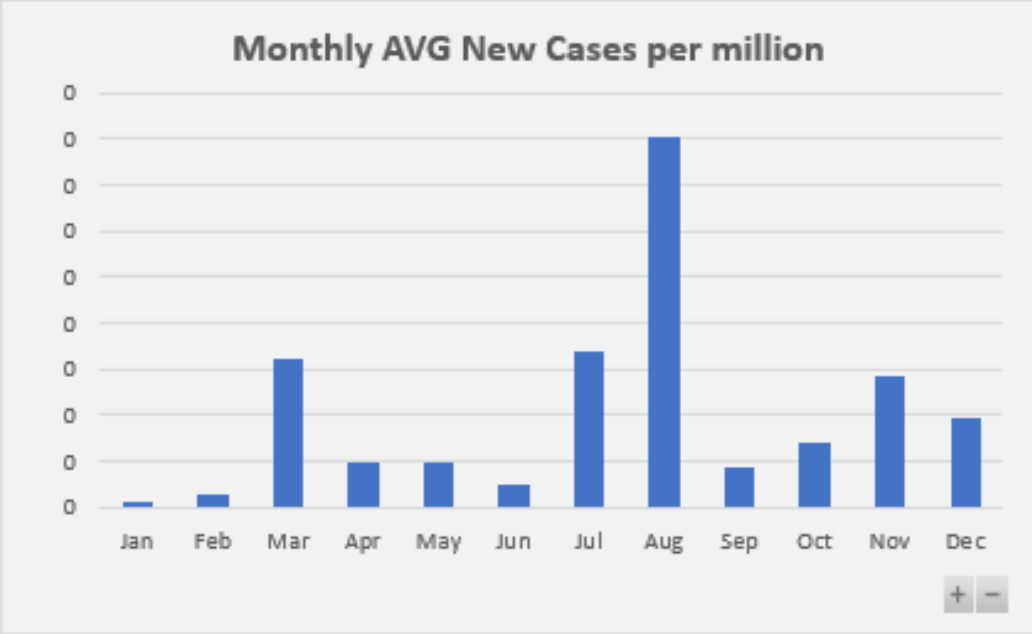


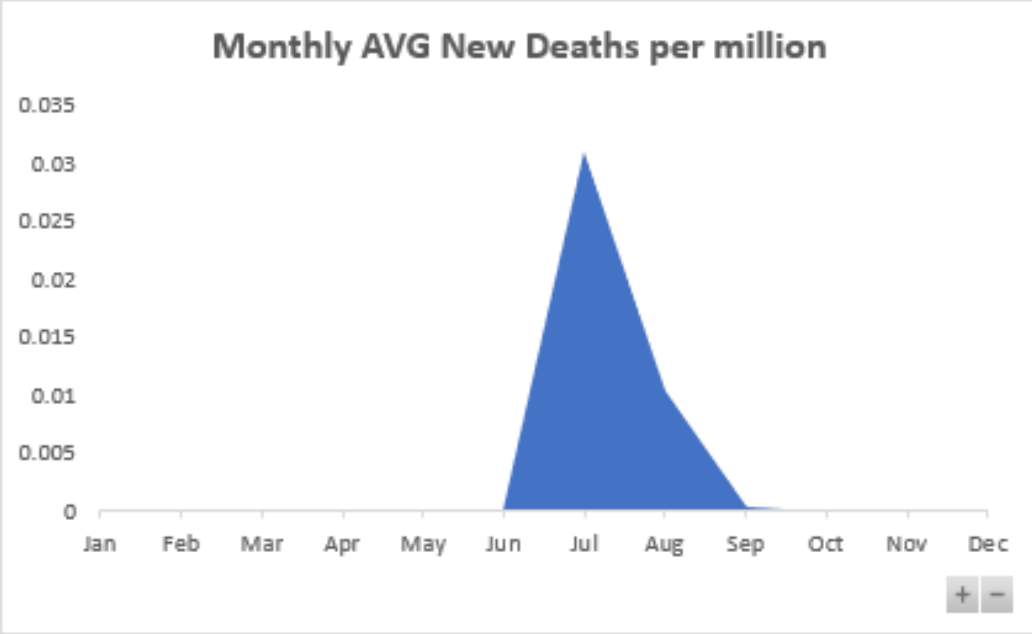




DASHBOARD 1 INSIGHTS :

SAU & VNM have mid-high CFR(%): BUT their New Cases & New Deaths figures are relatively small, curves bended in Q3 2020 and have stayed low.



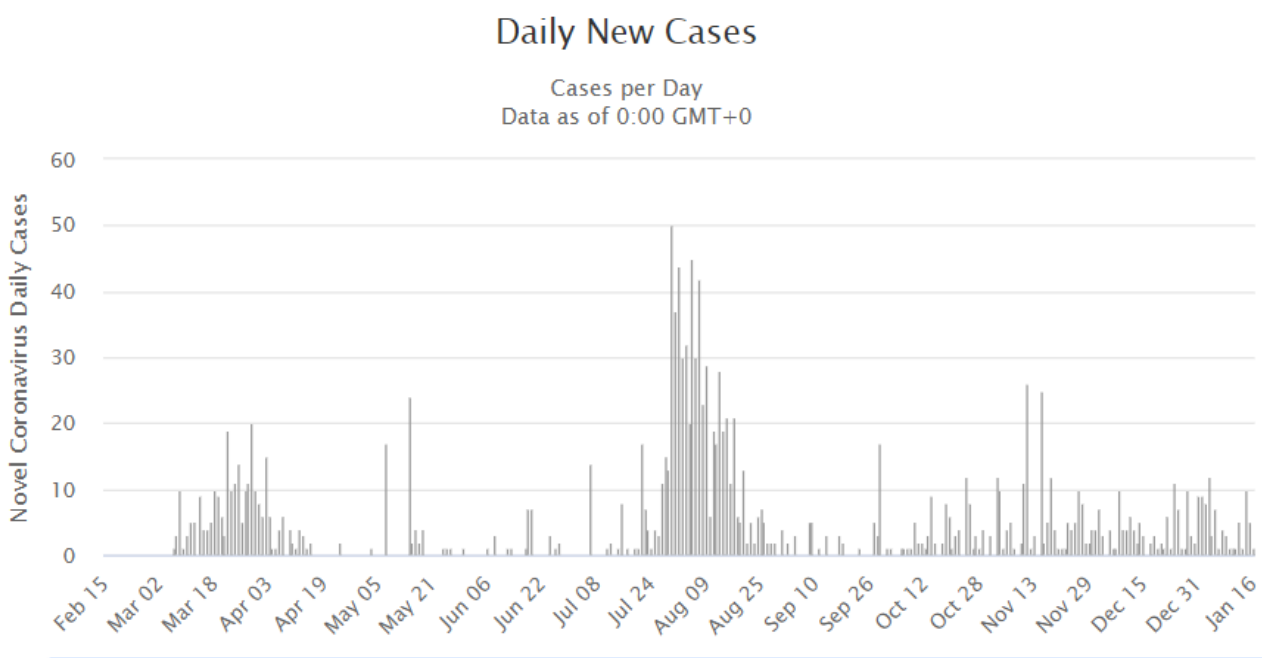


Additional Resource: weforum

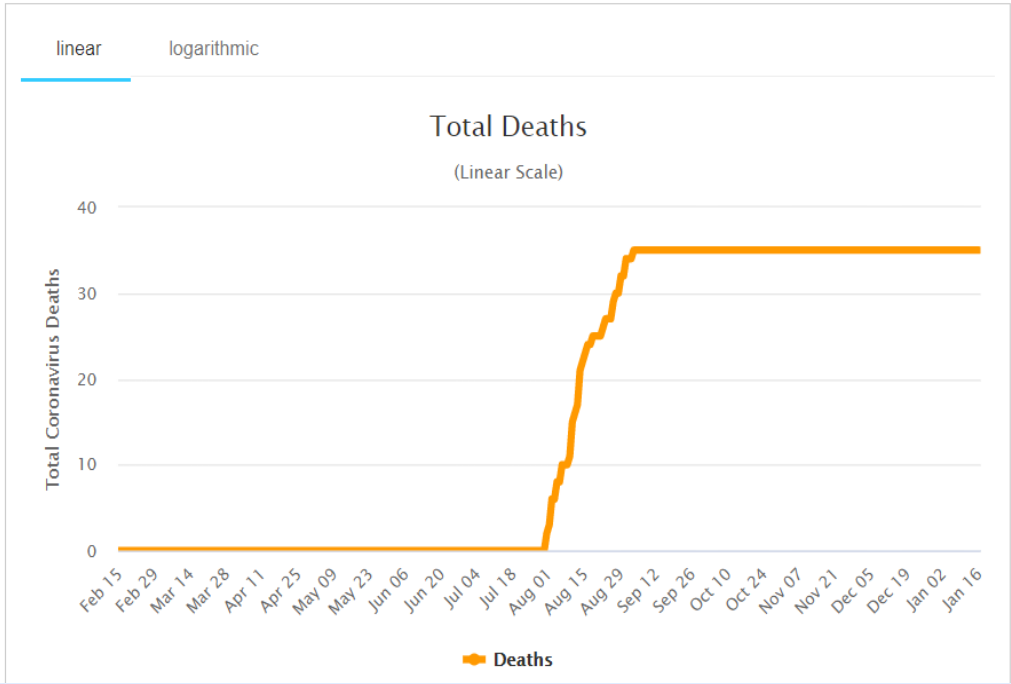
DASHBOARD 1 INSIGHTS :

SAU & VNM have mid-high CFR(%): BUT their New Cases & New Deaths figures are relatively small, curves bended in Q3 2020 and have stayed low.

Daily New Cases in Vietnam

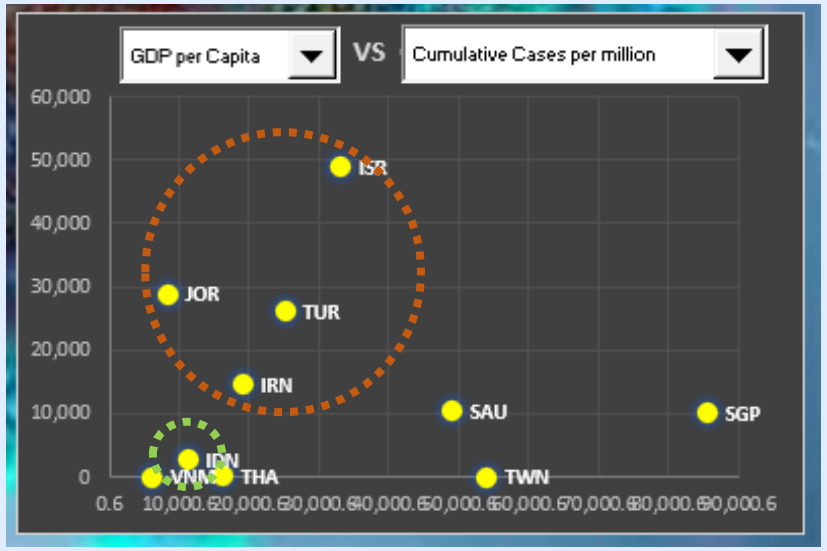


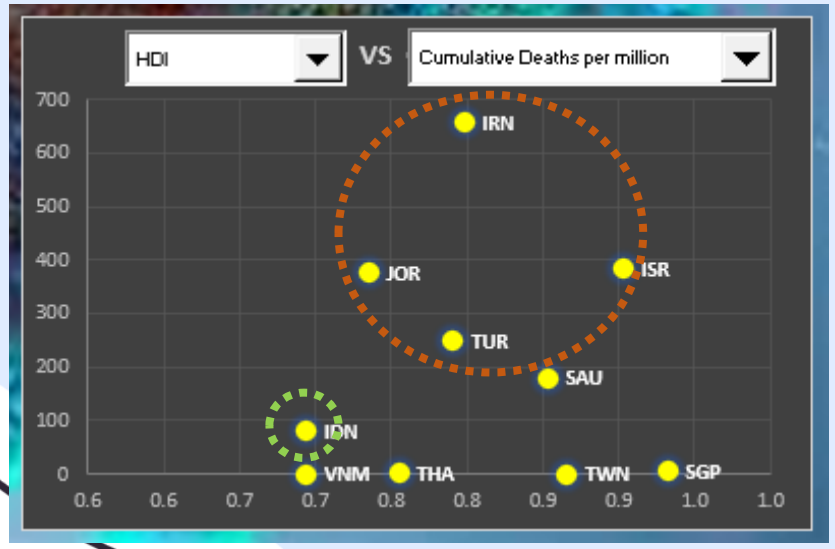
Total Coronavirus Deaths in Vietnam

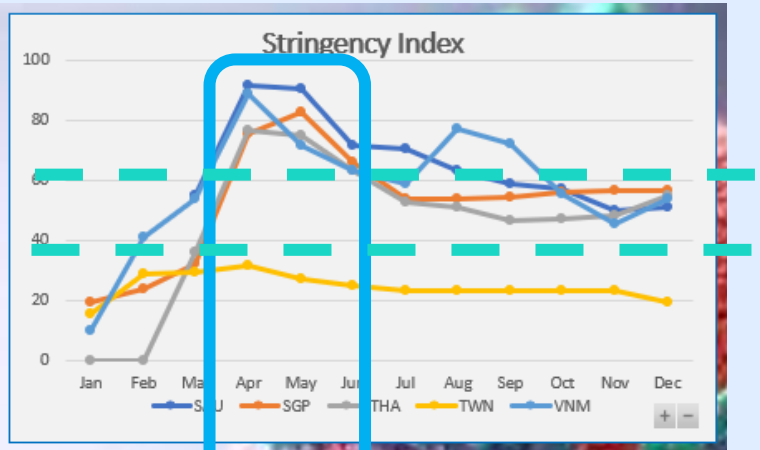


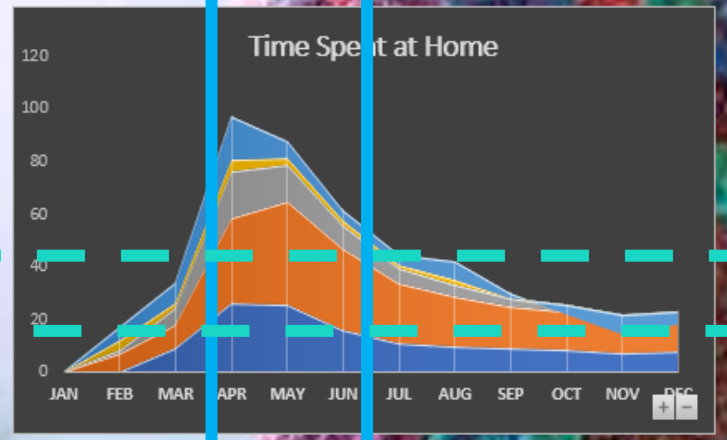
Source of Charts: worldometer ; Additional Resource: weforum

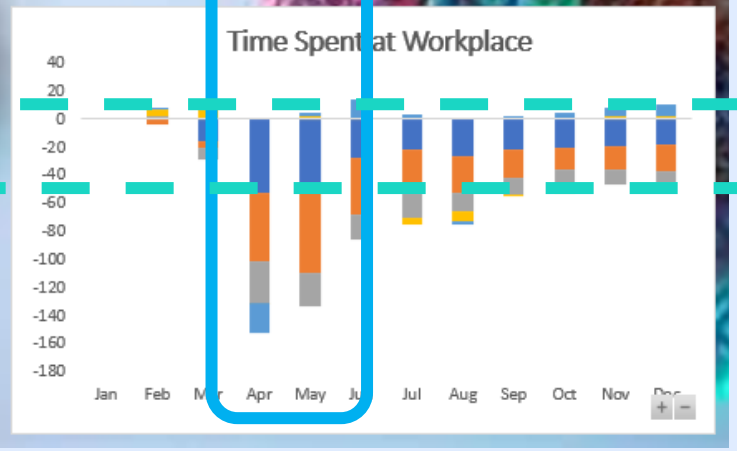
DASHBOARD 2 INSIGHTS :

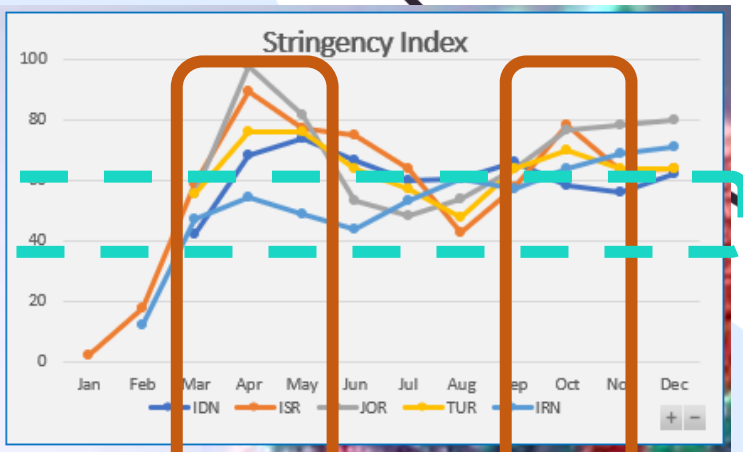


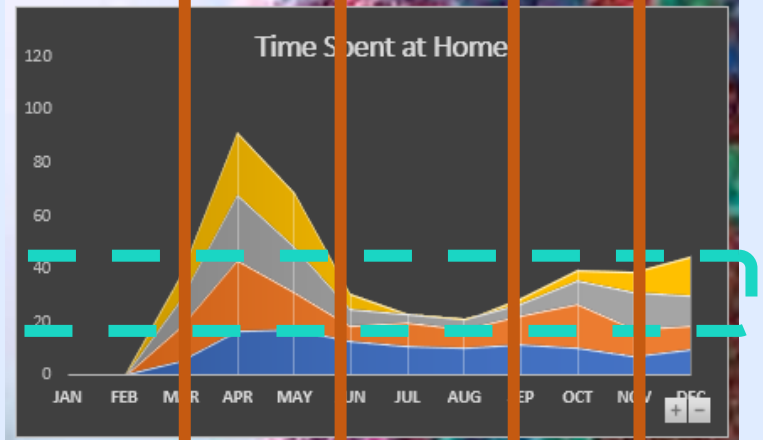


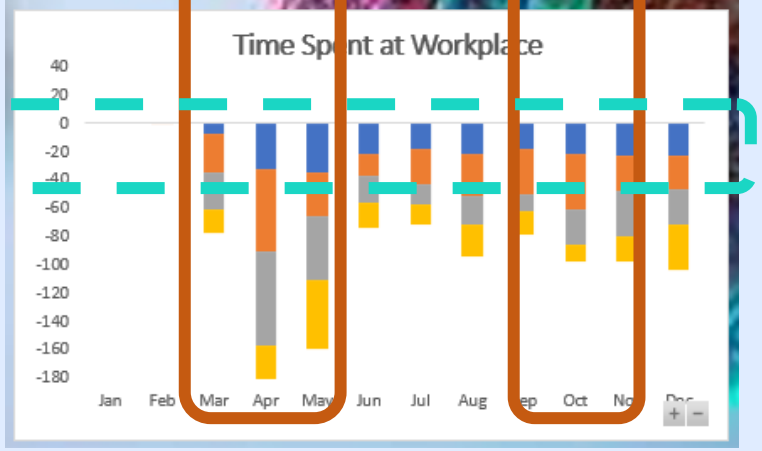










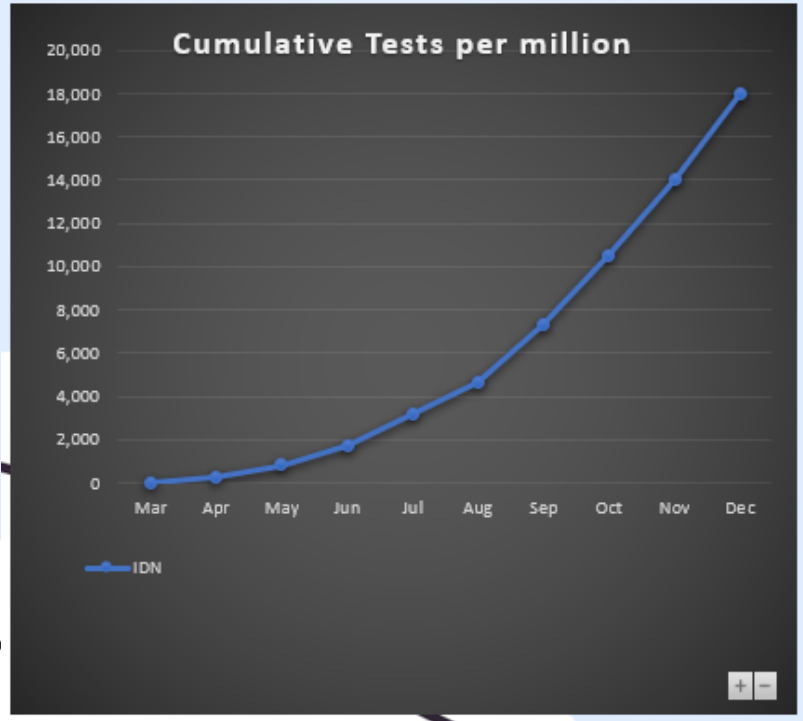


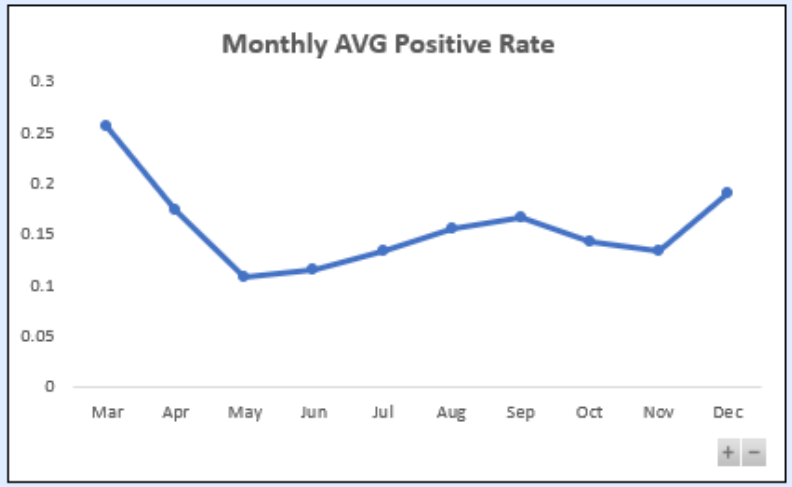
DASHBOARD 1 INSIGHTS :

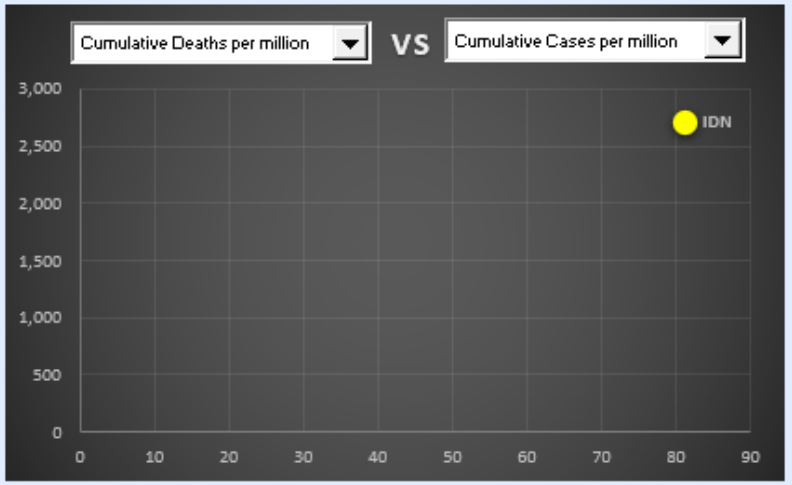
IDN (at Dec 2020) :

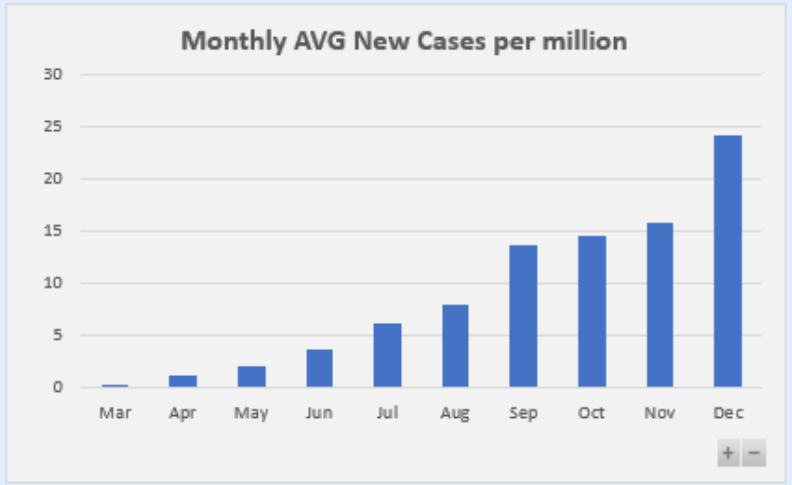
- High positive rate
- Low cumulative tests per million
- Low cumulative cases per million
- Low cumulative deaths per million
- Top5 new cases per million
- Top5 new deaths per million
- Mid-High CFR(%)

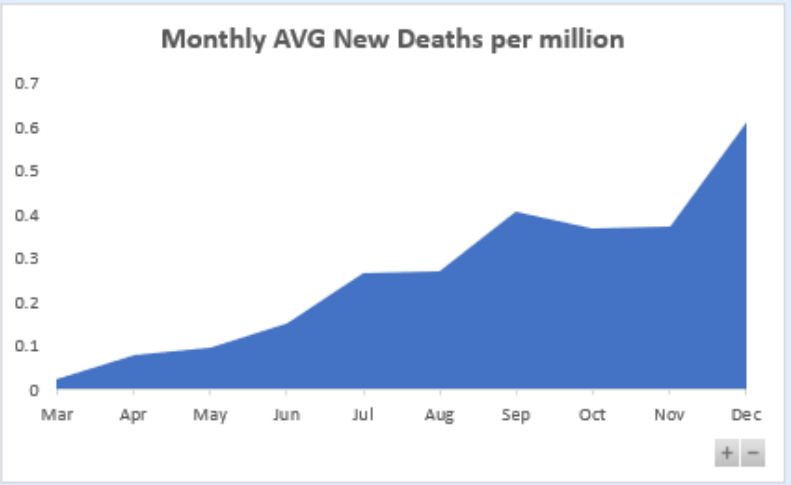
IDN: New Cases & New Deaths curves not bended.











DASHBOARD INSIGHTS :

Correlation Analysis based on Population & Medical History

Dashboard1	DEC_totalcases	DEC_totaltests	DEC_totaldeath	DEC_totalpop	DEC_popdense	Cardio	Diabetes	F-Smoker	M-Smoker
Cumulative Cases per million	1								
Cumulative Tests per million	0.592497047	1							
Cumulative Deaths per million	0.487433603	0.115695534	1						
Population [Aged 65 over] Index	-0.3433729	-0.225944168	-0.240066833	1					
Population Density Index	0.043170502	0.315056346	-0.195034981	0.195206118	1				
Cardiovasc Death Rate Index	-0.273228738	-0.105070862	0.016944239	-0.475859178	-0.308615589	1			
Diabetes Prevalence Index	0.510117342	0.512893384	0.120779922	-0.480616491	0.059850999	-0.057576973	1		
Female Smokers Index	0.241460188	0.074106469	0.200442096	0.467511069	0.014676297	-0.27155099	-0.34661594	1	
Male Smokers Index	-0.140129415	-0.087171302	-0.276376167	-0.086094828	-0.116045766	0.210907723	-0.308989998	0.041259163	1

Additional Resource: Smoking increases risk, Old age higher risk

Correlation Analysis based on GDP per Capita & HDI

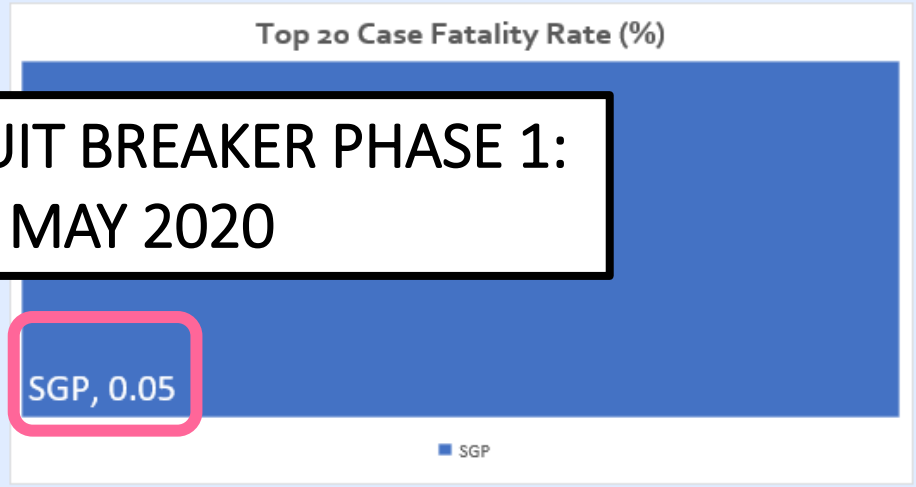
Dashboard2	DEC_totalcases	DEC_totaltests	DEC_totaldeath	GDP PPP	HDI
Cumulative Cases per million	1				
Cumulative Tests per million	0.592497047	1			
Cumulative Deaths per million	0.487433603	0.115695534	1		
GDP per Capita	0.480232464	0.489091733	-0.068604478	1	
HDI	0.349036319	0.452716119	0.108389547	0.721923356	1


CASE STUDY

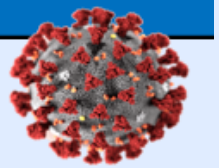
ASIA COVID-19 STATISTICS (updated 2020-12-31)

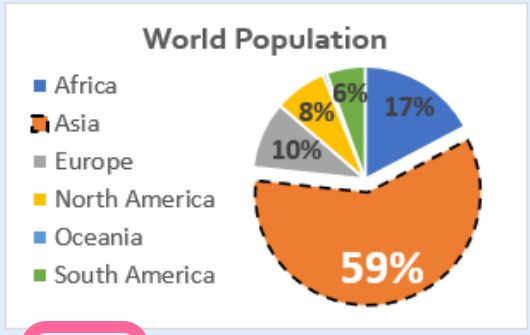
CIRCUIT BREAKER PHASE 1:
APR - MAY 2020

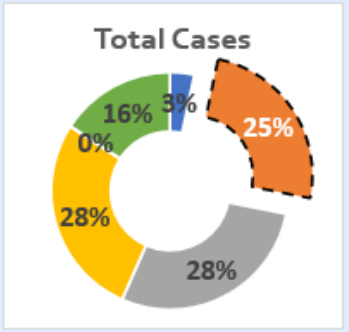
CASE STUDY: SINGAPORE

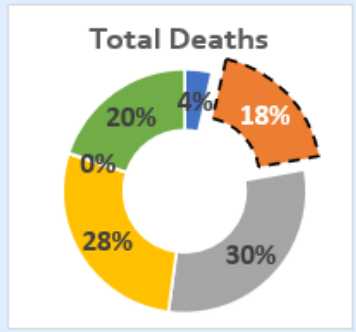


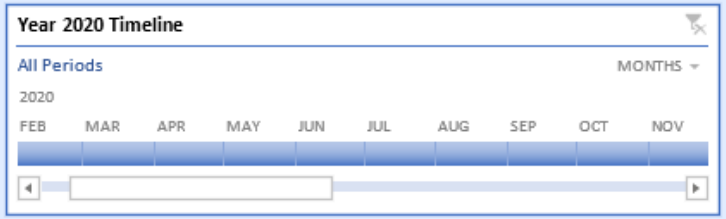
Population	Total Cases	Total Deaths
4,599,891,093	20,695,037	337,412

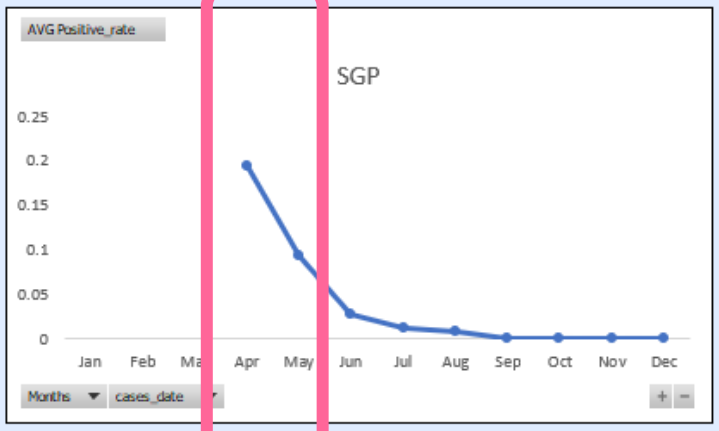


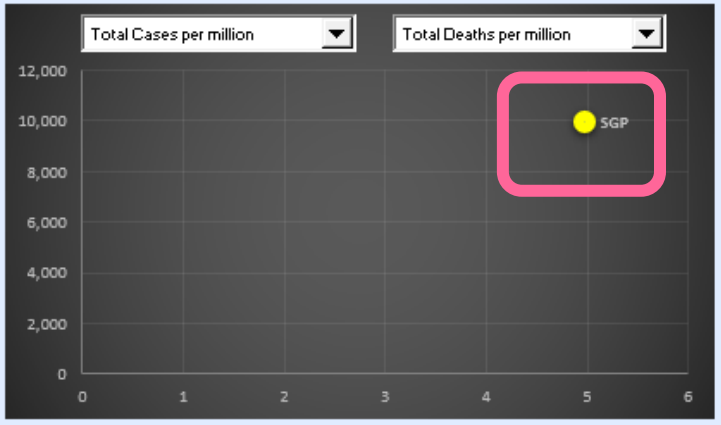


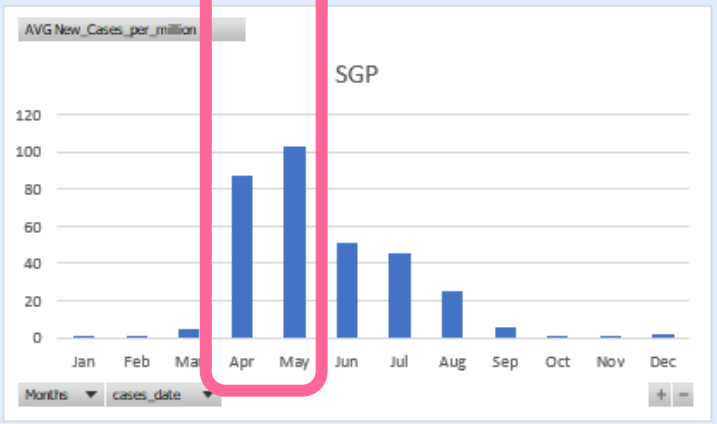


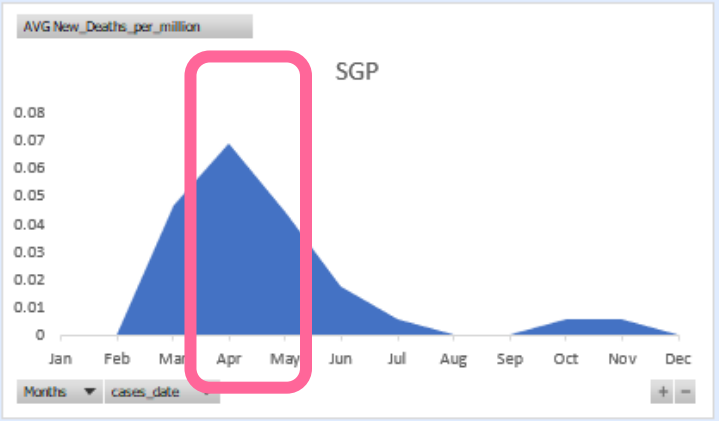








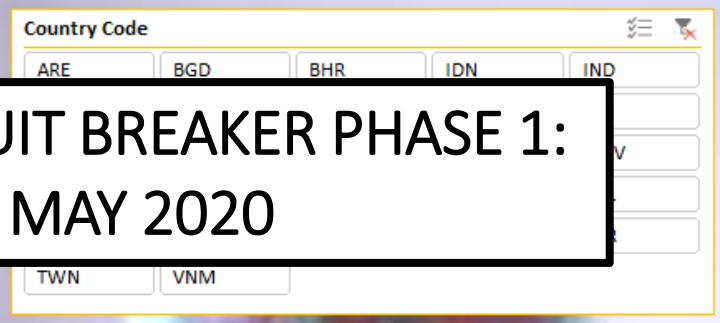


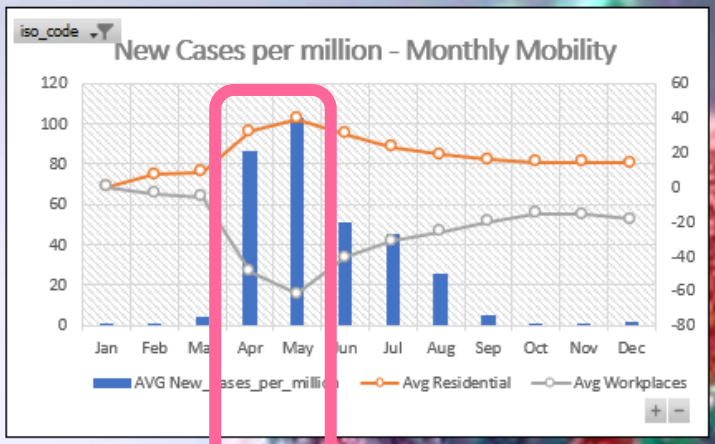


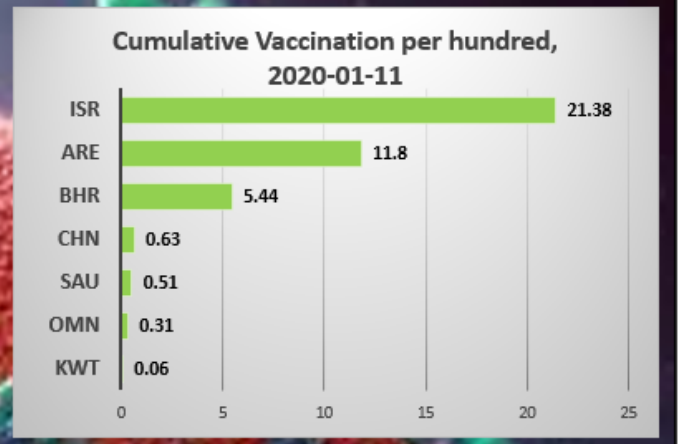
ASIA COVID-19 STATISTICS (updated 2020-12-31)

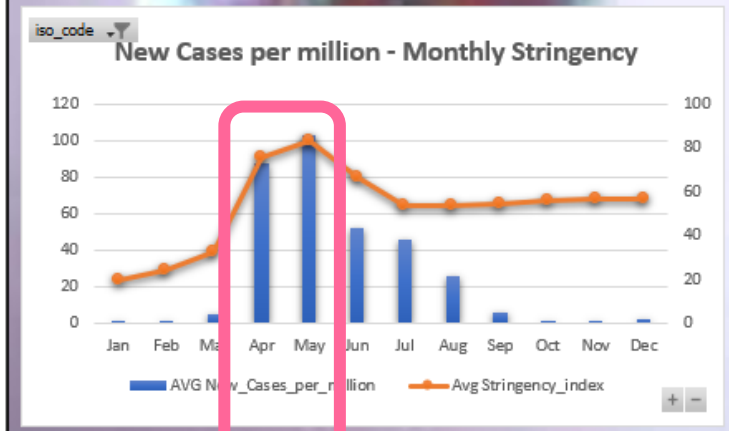
CASE STUDY: SINGAPORE

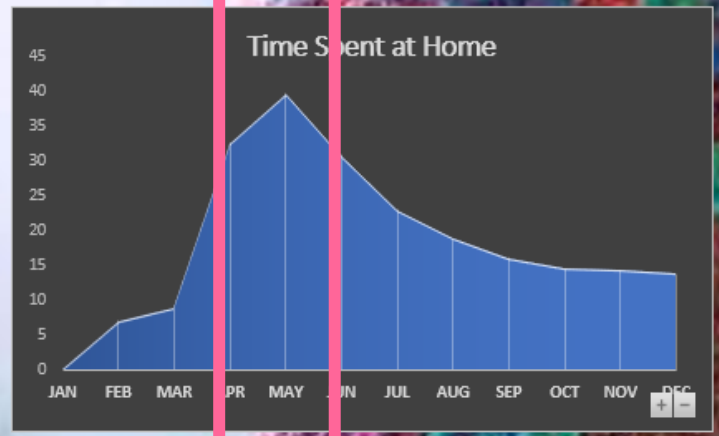
CIRCUIT BREAKER PHASE 1:
APR - MAY 2020

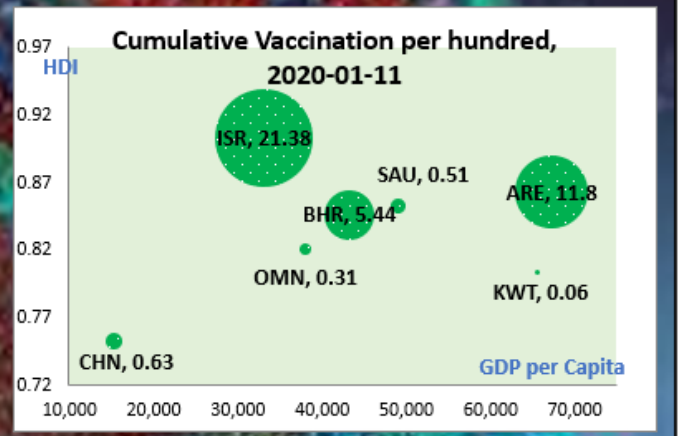


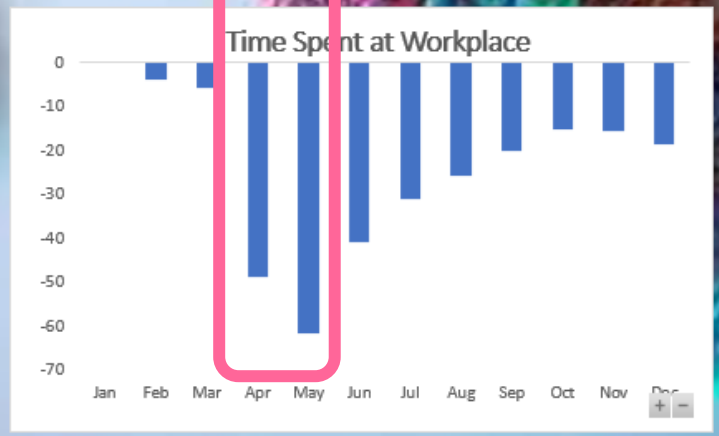


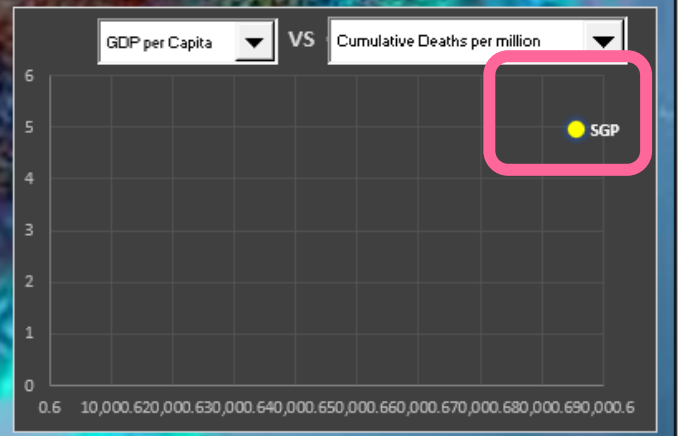








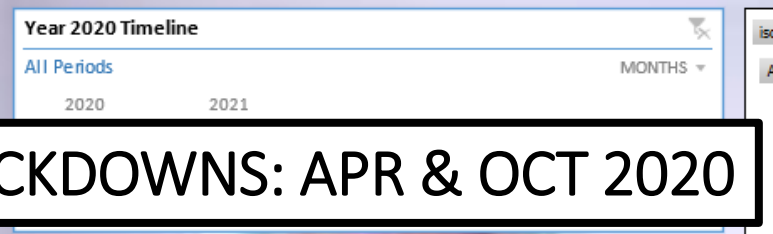


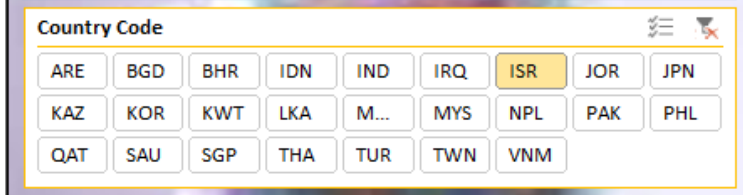


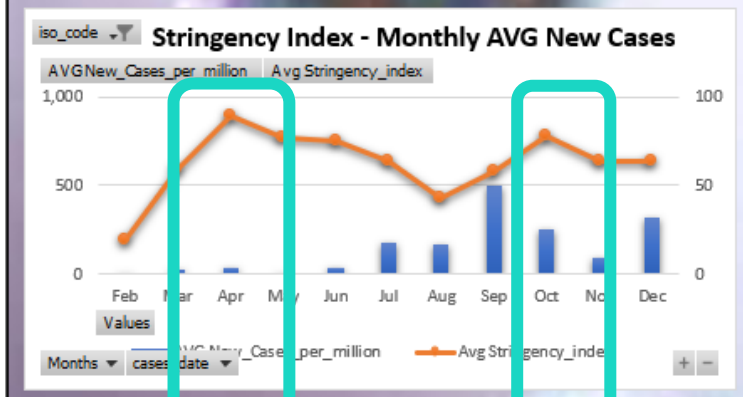
ASIA COVID-19 STATISTICS (updated 2020-12-31)

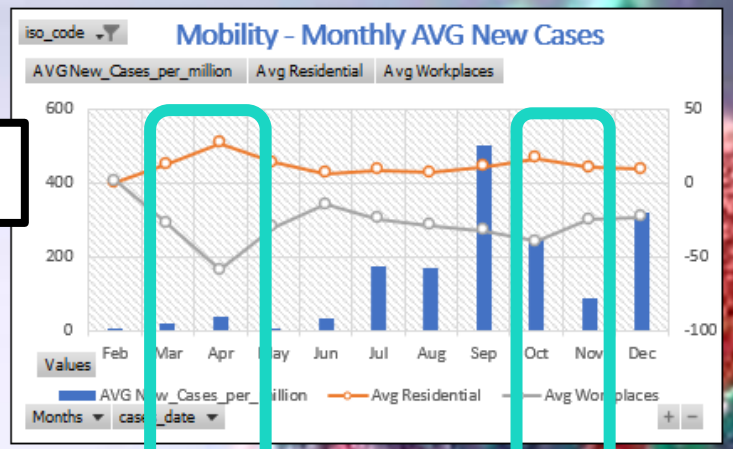
CASE STUDY: ISRAEL

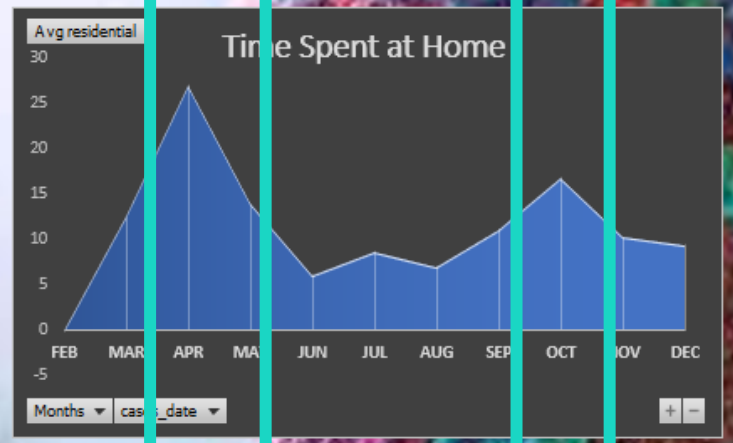
2 LOCKDOWNS: APR & OCT 2020

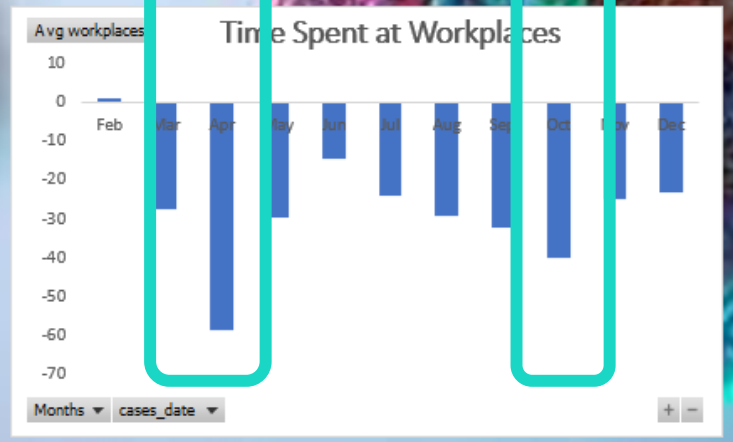


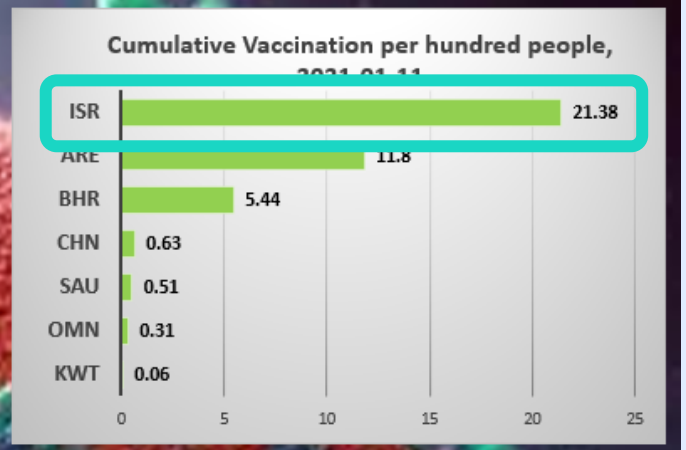


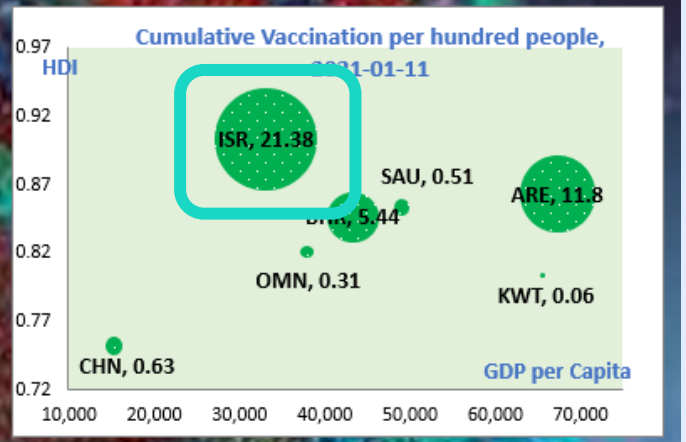


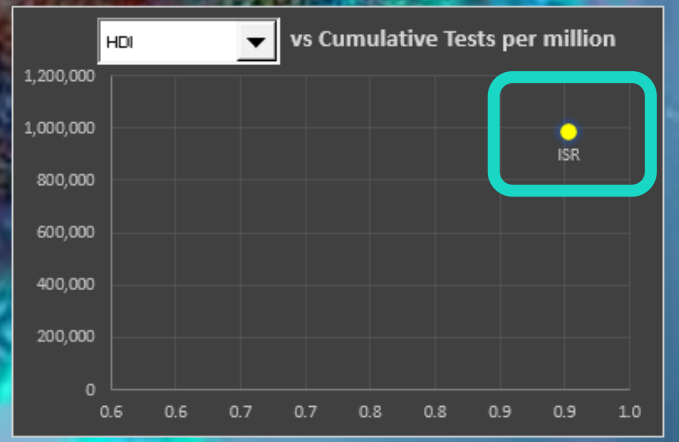












LIMITATIONS OF THIS DATA ANALYSIS:

1.

More than half of the Asia Countries were removed due to lack of data.
E.g. Hong Kong & China.

2.

Correlation Analysis of Population Age and Medical History to Covid would be more significant with Covid Patients Statistics.
Correlation Anlaysis of Economy Status to Covid would be more significant with absolute change of GDP per Capita & HDI between Year 2020 & 2019.

3.

Actual number of Cases is likely to be higher due to limited testing and not reported.


THE END.


THANK
YOU!


:)