## **COMMON THREAD**

Designing Behavioural
Strategies for
Immunization
in a Covid-19 Context

LNCT Webinar May 21, 2020

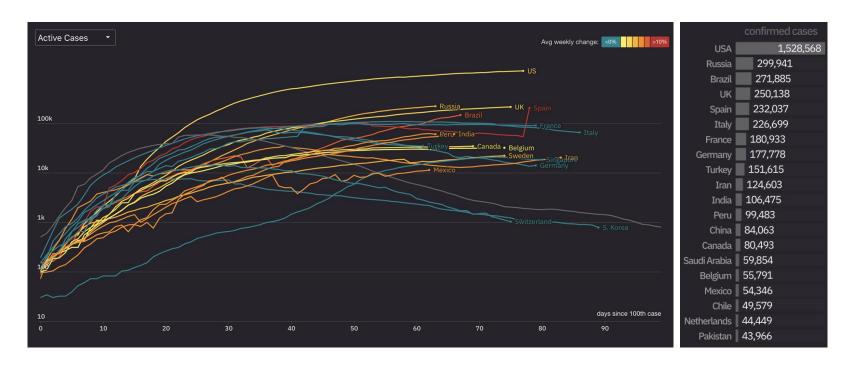


## **Flow**

- 1. Understanding the new Context for Immunization
- 1. Levers that shape behaviour change
- 1. Building Demand for Immunization in a Covid-19 Context
- 1. Discussion



## Overview of active Covid-19 cases globally



Updated May 20th 2020. Source: informationisbeautiful.net

Note: Many of the world's low- and middle-income countries are still in the early stages of the COVID-19 pandemic.

















## Behavioural Science

Recognizes that humans do not always act rationally. But they can be predictably irrational.

# What is behavioral science and how is it applied?



Behavioral Science is a social or biological science (such as psychology, sociology, or anthropology) that deals with human behavior, and seeks to generalize it in society.\*

Behavioral Insights applies those insights, and combines them with empirically-tested results to discover how humans actually make choices. \*\*

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"COVID-19 has all the characteristics that make it scary – it's novel, invisible, we have no control, we are involuntarily exposed to the risk, it makes us feel dread and we are personally vulnerable. As box ticking goes, this one is right up there"

## Behavioral Science says:



- 1. Humans are boundedly rational.<sup>1</sup>
- 1. We use heuristics, or mental shortcuts, to help with everyday decisions.<sup>2</sup>
- 1. Mental shortcuts can make life simpler, but also make us vulnerable to biases.<sup>3</sup>
- 1. Our biases are large and systematic enough that human behavior has been defined as "predictably irrational."<sup>4</sup>
- 1. Simon, H. A. (1957). Models of man; social and rational.
- 2. Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. Science, 185(4157), 1124-1131.
- 3. Kahneman, D. (2013). Thinking, fast and slow (1st pbk. ed.). New York: Farrar, Straus and Giroux.
- 4. Ariely, D. (2010). Predictably irrational: The hidden forces that shape our decisions. New York: Harper Perennial.

## System 1 & System 2 Thinking AKA Dual Selves Theory



**System 1** - People's impulsive, emotional system - It makes decisions in the moment, makes decisions based on emotional and social factors.

**System 2 -** More rational and deliberate. In general, this rational system makes better decisions than System 1.

But most times, people default to System 1 because we have mental shortcuts that we fall back on. Sometimes these mental shortcuts help us make good decisions (like continue good habits), but other times they bias us towards bad decisions (like reinforcing stereotypes or maintaining comfort zones)

Different strategies, policies and behavioral levers can help System 2 come out on top.

These levers can remove stress and cognitive burden and facilitate better behavior.

Our past and present experiences- our context - shapes how we will behave in the future

## What is our new Covid-19 context?

# Across the world, people are experiencing:

Fear Lockdown Social Distancing Contracted employment and business Mandated wearing of masks Limited mobility and travel Decreasing access to other health services Increased vulnerability of the poor



## Trust

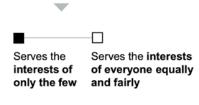
#### PRE-COVID: JANUARY 2020

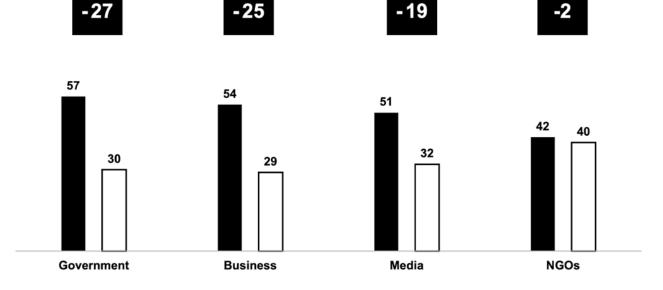
#### INSTITUTIONS SEEN AS UNFAIR

Percent who cite each as a reason they trust or distrust each institution

This institution...

- Is purpose-driven
- Is honest
- Has vision
- Is fair



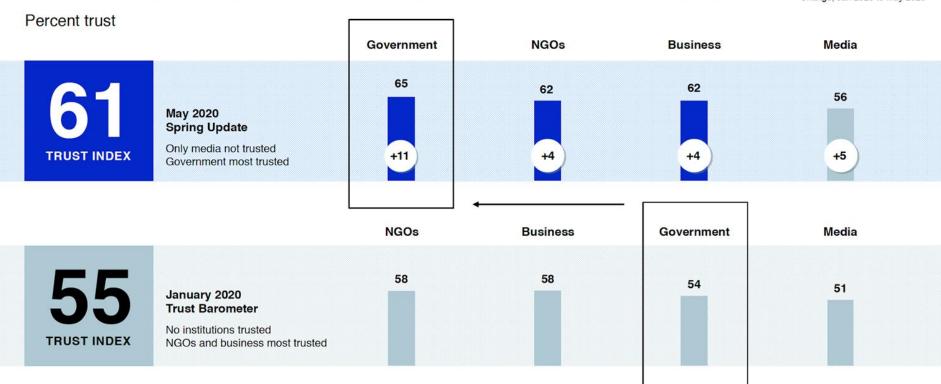


2020 Edelman Trust Barometer. Net scores represent positive responses minus negative responses to the following questions: [INSTITUTION]\_PER\_DIM. In thinking about why you do or do not trust [institution], please specify where you think they fall on the scale between the two opposing descriptions. 11-point scale; top 5 box, positive; bottom 5 box, negative. Question asked of half of the sample. General population, 25-mkt avg. Data not collected in China, Russia and Thailand.

#### **COVID UPDATE: MAY 2020**

## A RE-ORDERING OF TRUST: GOVERNMENT NOW MOST TRUSTED





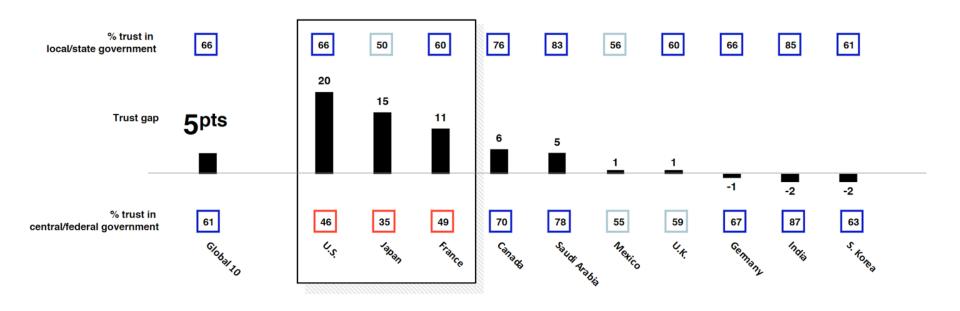
2020 Edelman Trust Barometer Spring Update. The Trust Index is the average percent trust in NGOs, business, government and media. TRU\_INS. Below is a list of institutions. For each one, please indicate how much you trust that institution to do what is right. 9-point scale; top 4 box, trust. General population, 11-mkt avg.



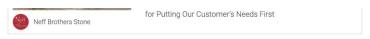
## WHERE NATIONAL GOVERNMENT LACKS TRUST, LOCAL GOVERNMENT FILLS THE VOID

Percentage-point gap between trust in local government and trust in national government





#### Kenya



Live updates

World map Reopening tracker

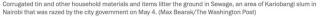
Lives lost

Your life at home

Africa

#### Kenya's preexisting condition: Mistrust in the government





**By Max Bearak** 



"I don't know the name of one person who has died. All we can see is the government is getting billions of shillings to fight this disease, which for us does not exist."

#### **ON GETTING TESTED:**

"And then what? Pay 28,000 shillings? We don't earn now. I can't pay 50 for a mask. And because I cough once, I will pay 28K [for going into quarantine]? Don't judge us for not going,"

## **Viet Nam**

How did trust in Government help achieve Covid-19 compliance, despite so few cases?

Nam Tong
Associate Director, Viet Nam,
Clinton Health Access Initiative



#### COVID-19 update (by May 20)

#### Not any new cases have been detected in the community in the last 34 days in Vietnam

Confirmed cases

(cases from overseas: 183)

Recovered

Death

0



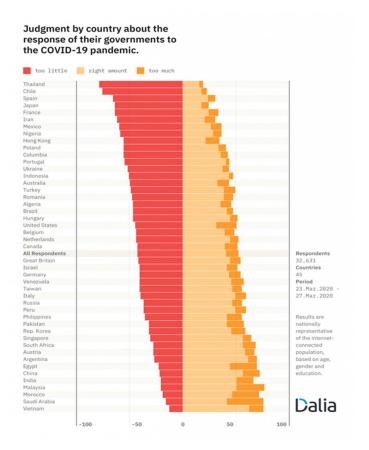
#### Government response

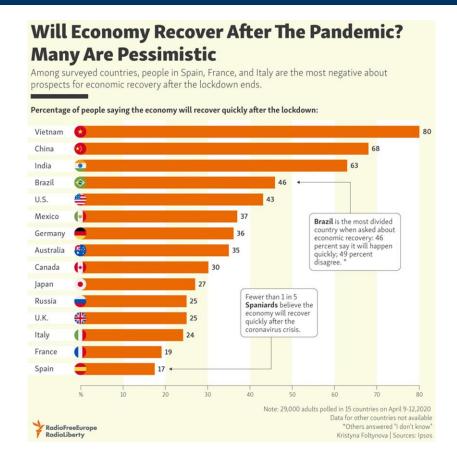
- Quarantine (high-risk groups, people/community related to confirmed cases)
- Social distancing (school closing, restriction of travel and grouping, face mask obligation)
- Border and immigration control
- Expansion of national lab system for SARS-COV testing
- Application of IT (for health declaration, information)
- Prepare for different scenario (ventilator and test kit manufacturing, vaccine research...)
- Financial aid for economic impact

#### Factors for success

- Proactive response by the government
- Strong leadership and robust government intervention
- Engagement of domestic resources for COVID-19 response: military, police, health, provincial governments, entrepreneur, private sector, volunteers
- Provision of information with transparency
- Maximize communication/propaganda for community support

#### Public opinion on government response & economic recovery







THANK YOU.

Source: https://video.vnexpress.net/tin-tuc/nhip-song/truyen-hinh-australia-ca-ngoi-cach-viet-nam-chong-dich-4102507.html

#### **Trust**

- Trust is the cornerstone of successful behavior change
- Understand who has trust in your country and community and leverage those people and organizations
- Trust can be very local people and organizations that are trusted in one area do not always transfer to another.
- Governments have a massive opportunity to gain the trust of their populations now.
- Competence, compassion, equity, and justice are key components of gaining trust. Perceptions of trust can change quickly in either direction

## Transparency

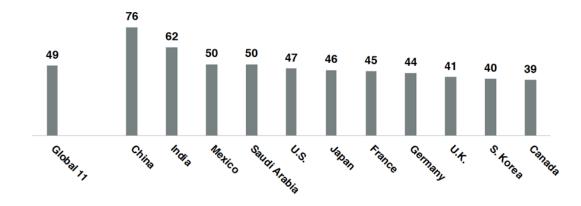
#### **FAKE NEWS CONCERNS ADD TO INSTABILITY**

Percent who agree

I worry that there is a lot of **fake news and false information** being spread about the virus

It has been difficult for me to find reliable and trustworthy information about the virus and its effects

6<sup>1</sup>/<sub>%</sub>



## CDC's Principles of Crisis and Emergency Risk Communication

- 1. Be first
- 2. Be right
- 3. Be credible
- 4. Express empathy
- 5. Promote action6. Show respect

#### **Nigeria**



People wear face masks in compliance with a state directive to curb the spread of Covid-19 in Lagos. Photograph: Pius Utomi Ekpei/AFP via Getty Image

After weeks of denials at the local level, last week a team of officials sent by Nigeria's president, Muhammadu Buhari, said initial investigations had established that ... excess deaths were linked to Covid-19.

Low levels of testing across Africa's most populous country have hamstrung health officials in states such as Kano.

This, combined with a lack of protective clothing for medical staff, has led to many health services in the state closing all but their emergency care facilities.

Public health at its core is about understanding and working with human behavior, and not treating people as robots.

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A competent public health response cannot blame people for its failure – it only indicates the policy itself was badly designed. Blaming the public is an admission of failure.

Dr. Ravi Rannan - Eliya, Executive Director and Fellow,of the Institute of Health (IHP), Sri Lanka

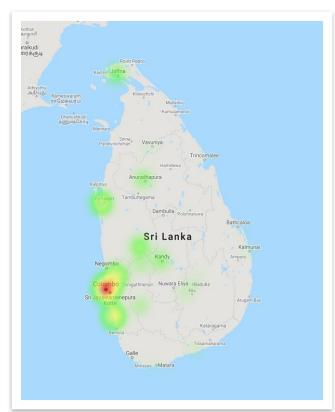
## Sri Lanka

How did the Government and other players manage public communication and transparency in Sri Lanka, particularly amongst the most vulnerable populations?

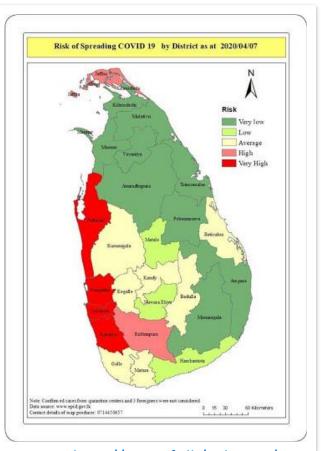
#### Dr. Anuji Upekshika Gamage,

Consultant Community Physician, Management Development and Planning
Unit, Ministry of
Health, Government of Sri Lanka

#### COVID-19 situation (8/5/2020)



- Confirmed Cases- 824
- Recoveries- 232
- Deaths- 9
- Mix of imported and mostly linked local cases, but no sustained community transmission
- Highly focal distribution with relaxation of lockdowns by risk status of district



Source: Health Promotion Bureau 2020

Source: <a href="http://www.ft.lk/columns/Mappinthe-risk-of-spreading-COVID-19/4-698762">http://www.ft.lk/columns/Mappinthe-risk-of-spreading-COVID-19/4-698762</a>

#### Disruptions to delivery because of COVID and issues

- Health system constraints (Human and financial resources)
- Social distancing measures in place to mitigate the ongoing COVID-19 pandemic
- The routine services put on hold and only emergency and essential services are in operation
- Supply chain disruption due to transport disruptions
- Caregivers hesitancy to get immunization
- Fear of getting infected/ being quarantined

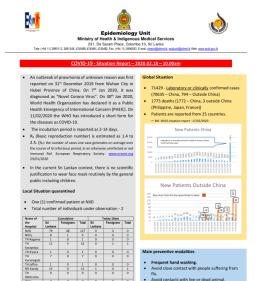
#### **COVID-19 Risk communication**

#### The hotline



Guidance as of 19.03.2020

#### **Situation report**



Always cover the nose and mouth while coughing

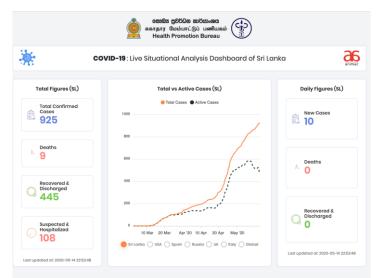
or sneezing (with disposable tissue / cloth or

cough to the bent elbow).

Do not touch mouth / nose / eyes unnecessarily.

Avoid crowded places as much as possible.

#### **Dashboard**





#### Risk communication

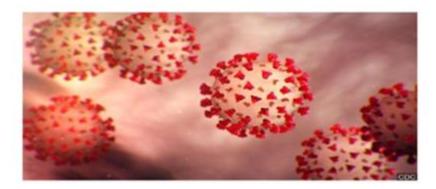


#### Risk communication (Phase 3)

(at the stage of gradual exit from lock down strategy)

Health Promotion Bureau

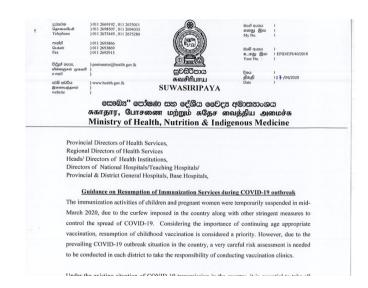




#### focused on following key areas;

- ✓ strengthening risk communication system,
- ✓ strengthen internal and partner communication,
- ✓ public communication,
- communication with affected communities,
- ✓ rumor monitoring, identification, verification and management

#### Immunization in Sri Lanka



- High risk areas: may remain under strict restrictions on public movement, while
- Field clinics will start when the curfew is over
- low risk areas: gradually commence the usual daily routine adhering to strict health and safety behaviours.
- Resumption of immunization services have occurred

#### Need for a detailed risk communication plan

- For the Preventive health services (immunization clinics)
- Added advantages :
  - ✓ The area MOH who also plays a main role in the prevention and control of COVID carries
  - ✓ As services are mainly carried out by the MOH staff whom are close to the community it helps to communicate with the caregivers and get them down to the clinic by appointments
- Current observations
  - ✓ At the moment no hesitancy
  - Caregivers/ parents generally have a good relation ship with the MOH staff and the attitude towards vaccination is satisfactory
  - ✓ Hesitancy may occur which will be related to COVID-19
  - ✓ Fear of Infection and quarantine
- Recommendations
  - **✓** Risk communication strategy for immunization
  - ✓ Immunization at Quarantine facilities to prevent possible outbreaks ----- immunization
  - ✓? Flu vaccination for high risk groups



# Côte D'Ivoire



What are some of the rumours that have been spreading about Covid-19, and/or immunization? Why do you think these have been spreading, and what is their source?

Pr EKRA Kouadio Daniel

Coordinating Director
Expanded Program on Immunization
(CDEPI)
Côte d'Ivoire

## Rumours spread as part of the fight (1)

- Rumours spread about Covid-19 relate mainly to the treatment (garlic, neem leaves...)
- Persistent rumours and misinformation on vaccination: a vaccine against Covid-19 is being tested in Africa and in particular in Côte d'Ivoire; the disease would spread through this vaccination
- Call for the vaccination offered in health centers to be refused:
  - For example: A delivery truck was blocked in the city of Bangolo on the pretext that this truck was transporting the Covid vaccine.
- Rumours and calls follow the proposal of a European doctor on a foreign TV channel, to test a candidate vaccine in Africa

## Rumours spread as part of the fight (2)

- Sources: Rumours spread through social networks by persons outraged and indignant at the announcement to test a vaccine in Africa. The latter do not understand that the least affected continent is being proposed as a vaccine test site;
- It is not a real rejection of vaccination but a distrust in the face of fear of the disease;
- What leads to worry are the messages disseminated by anti-vaccine;
- Advocates since videos, in support of rumors have resurfaced reporting a plot by manufacturers and vaccine funding organizations.

## Consequences of rumors about vaccination (1)

- Telephone polling in mid-April: 55,291 respondents, 52% say they are not continuing to vaccinate their children;
- Among these: 25% do not continue vaccination because of rumours circulating; 24% because they don't believe in vaccination;
- Decrease in attendance at vaccination centers;
- Increased vaccine hesitancy with refusals of vaccination;
- Decrease in vaccine coverage with risk of resurgence of EPI target diseases and possibly epidemics, if the situation persists.

## **Consequences of rumors about vaccination (2)**

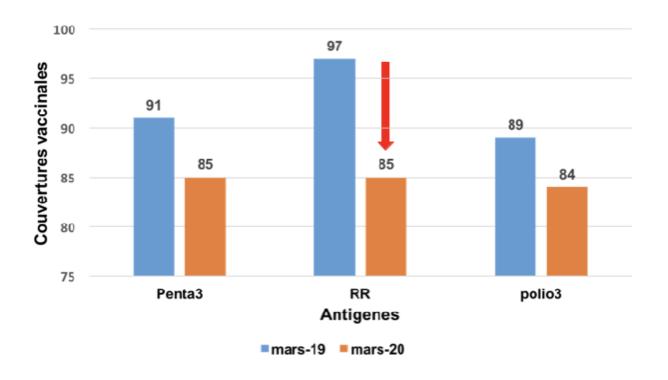


Figure 1: Evolution of vaccine coverage, Côte d'Ivoire, January to March, 2019 to 2020

### Measures taken to reduce the impact of rumours on vaccination

#### Communication

- Address by the Minister of Health to the population on 8 April, 2020, to dispel the rumours and calling on parents to have their children vaccinated;
- Dissemination of this address through media, to regional and departmental directors, prefectural bodies and heads of local authorities for local dissemination communication;
- Carrying out an interview on vaccination posted on social networks and maintaining supervision of these networks to respond to false information
- Supervision at district level on hesitancy, weekly report;
- Radio and television broadcasts with the participation of civil society, partners, paediatricians and other experts in vaccinology.

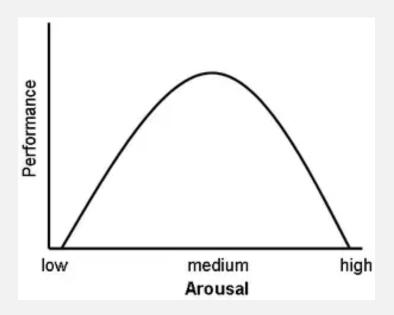


# Fear

## Yerkes-Dodson Law: Fear or arousal can be both good and bad

Stress and arousal levels can help focus one's motivation and attention on the task at hand, but only up to a certain point.<sup>1</sup>

Optimal performance slightly changes depending on the difficulty of the task.<sup>2</sup>



- Yerkes RM, Dodson JD. <u>The relation of strength of stimulus to rapidity of habit-formation</u>. <u>Journal of Comparative Neurology and Psychology</u>. <u>1908;18(5):459–482</u>. Reprinted by <u>Classics in the History of Psychology</u>. <u>An internet resource</u>. Christopher D. Green, York University, Toronto, Ontario.
- Diamond DM, Campbell AM, Park CR, Halonen J, Zoladz PR. <u>The temporal dynamics model of emotional memory processing:</u> a synthesis on the neurobiological basis of stress-induced amnesia, flashbulb and traumatic memories, and the Yerkes-Dodson law. *Neural Plast.* 2007;2007;60803. doi:10.1155/2007/60803

#### **How Yerkes-Dodson law translates to Covid19**



Too little fear can lead to demotivation and inaction



Too much fear can lead to paralysis or inappropriate action



Optimal fear leads to rational behaviour



Fear needs to be combined with self-efficacy for it to lead to desired behavior change.



HEALTH AND SCIENCE

# 60% to 70% of the German population will be infected by the coronavirus, Merkel says

PUBLISHED WED, MAR 11 2020-7:59 AM EDT | UPDATED WED, MAR 11 2020-10:47 AM EDT

#ELLIOTSMITHCNBC

SHARE f y in

KEY POINT

- Merkel said Berlin would spend whatever was necessary to contain the virus in Germany, but declined to commit to providing direct material aid to virus-stricken trate.
- More than 121,000 cases and 4,368 deaths have now been confirmed around the



German Chancellor Angela Merkel, on February 14, 2020 in Berlin, Germany. Felix Zahn | Photothek via Getty Images

German Chancellor Angela Merkel has said that up to 70% of the German

#### TRENDING NOW



New Yorkers should be prepared for a 'shelter-inplace order,' Mayor Bill de Blasio says

## Social Norms

#### Social Proof

Humans are finely attuned to monitoring what everybody else is doing (even subconsciously).

Most of us use "what other people do" as a mental shortcut to decide on what the appropriate behaviour would be if we are unsure. It's a simple decision mechanism called "social proof heuristic", a concept popularised by psychologist Robert Cialdini.

When we see people staying indoors, the natural reaction is to do the same. Social proof can help decide how to act, or reassure us that we are taking the right action.







## Social Disapproval

Because humans are deeply influenced by what other people do, as well as how other people perceive us, social disapproval by our communities is a very strong lever to influence behaviour.

Social disapproval is a powerful way to establish norms quickly. Some countries are already adopting this tactic around wearing masks.

# Cuomo says not wearing a mask is 'disrespectful' to coronavirus frontline workers

Step outside your door without a face mask in Hong Kong, Seoul or Tokyo, and you may well get a disapproving look.

"By disregarding the health and well-being of others, and themselves, cyclists [in South Africa] run the risk not only of accelerating transmission but also of being labelled as irresponsible and disrespectful."

## India

How has the Government used fear and social norms to get people to comply with Covid-19 measures, and what has been people's response?

How do they plan to use these two levers as things open up, and as they begin nudging people towards using immunization services?

## Dr. Kapil Singh

National Project Officer, Gavi Secretariat, Health System Strengthening Project, Immunization Division, Ministry of Health and Family Welfare, Government of India



## **Join Live**

PM Modi's address to the nation on Coronavirus



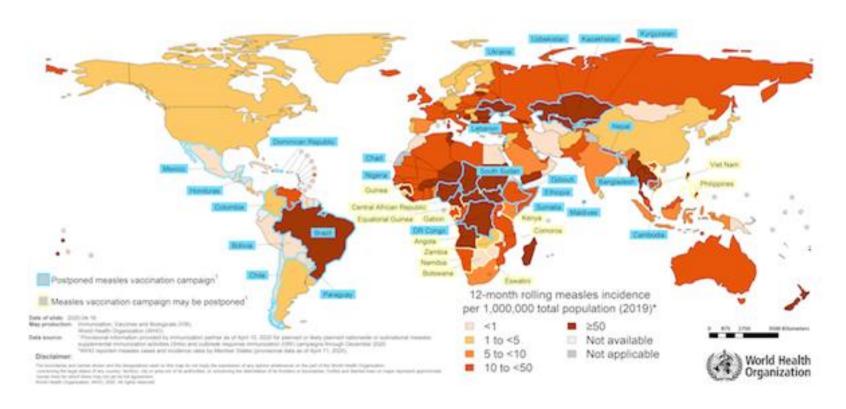








# More than 117 million children at risk of missing out on measles vaccines, as COVID-19 surges



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The legacy of COVID-19 must not include the global resurgence of other killers like measles and polio.

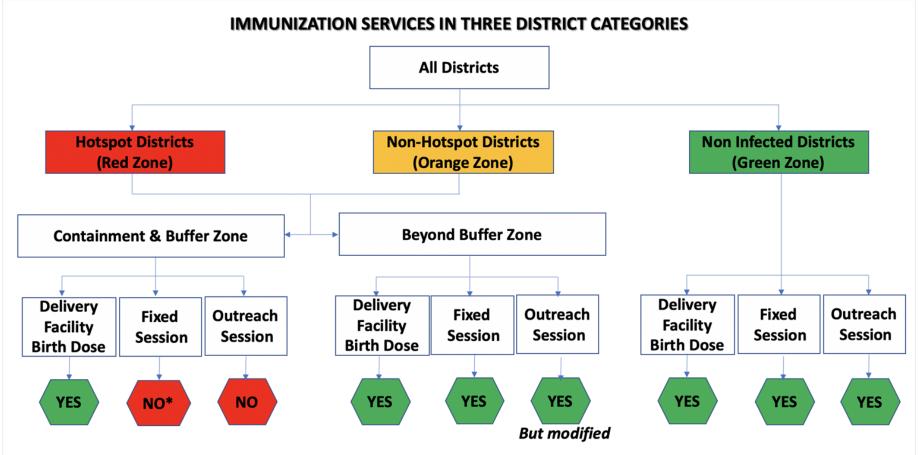
Dr Seth Berkley, CEO Gavi

## India

Previously people were told they shouldn't vaccinate. Now they're being told they can. How is the Government communicating this change? Do people trust it?

## Dr. Kapil Singh

National Project Officer, Gavi Secretariat, Health System Strengthening Project, Immunization Division, Ministry of Health and Family Welfare, Government of India



**Note:** Physical distancing, hand washing & respiratory hygiene need to be maintained irrespective of district zones by beneficiary & service provider; Weekly categorization into Hotspot, Non-Hotspot & Non-Infected districts is a dynamic process hence immunization service guidelines are to be implemented as per the updated category





## **Viet Nam**

Viet Nam has recently resumed immunization services. What has the country learned, and any advice for others?

Dang Thi Thanh Huyen,
Vice Head of National EPI, Ministry of Health,
Government of Viet Nam

## **Expanded Program of Immunization during COVID-19 pandemic**

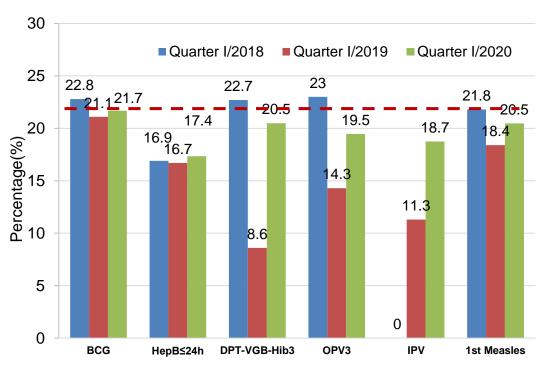
- On January 23, 2020, the first case of COVID-19 is recorded in Vietnam
- After that, the number of suspected cases and confirmed cases has increased, a large number of people needing to be monitored and quarantined, causing considerable pressure on the health system.
- Since March 2020, the Government has asked people to implement a number of measures to limit close contact and limit the concentration of crowded people.
- Facing to COVID-19 pandemic, many facilities has not provided immunization survices including since mid-March 2020.
- => This is one of the reasons leading to immunization rates in the quarter I/2020 was lower than the same period in 2018.

## **Expanded Program of Immunization during COVID-19 pandemic**

- By the end of March 2020, the Vietnam Government has ordered social distancing in the whole country since April 1, 2020..
- The Government, the Ministry of Health has issued a guiding document on the suspension of immunization nationwide
- On April 22, 2020, the Government directed to end the social distancing in 59/63 provinces/cities (except for high risk provinces of Hanoi, Bac Ninh, Ha Giang and Ho Chi Minh City).
- EPI developed a technical guideline on the implementation of immunization 59 low-risk provinces / cities (except for 4 provinces of Hanoi, Bac Ninh, Ha Giang and Ho Chi Minh City) to re-establish routine immunization in a context of SARS-COVID-2 infection
- By week 2, May 2020, the immunization activity was re-launched nationwide.
- However, the apprehension of the community's reluctance was recognized in some localities. The parent did not bring the children for immunization (both public services and private services) in the fear of SARS-COVID-2 infection.

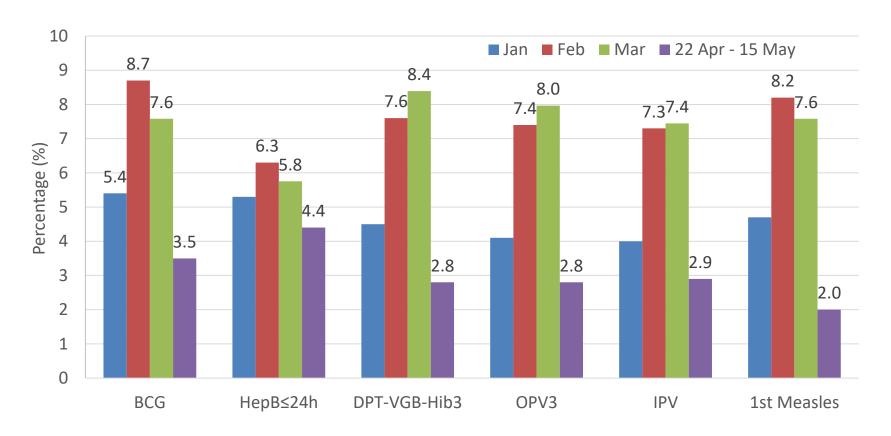
## Performance of Immunization services

#### immunization coverage among 1-year-olds



- Nationally, the vaccination rate in the 1st quarter of 2020 was lower than the same period in 2018 (before the outbreak of COVID-19) and was higher than the same period in 2019.
- In the 1st quarter of 2019, the vaccination rate was low due to the lack of vaccines in the first months of the year and the people's anxiety about AEFI due to vaccine hesitance during pentavalent vaccine switch.

## Performance of Immunization services



Immunization coverage among 1-year-olds, 2020



# How can these behavioral levers be used to encourage immunization?

- 1. Trust
- 2. Transparency
- 3. Fear/Risk
- 4. Social Norms

hello@gocommonthread.com www.gocommonthread.com Gavi countries.

• 75 (out of 107) countries reported that VPD campaigns and/ or outbreak

Limited or suspended services due to Covid-19 were reported in 45 /52

Shortage of immunization workers and PPE to equip them for their jobs

- response activities have been postponed
  Reports of reduced demand for immunization services because of lack
  - of trust in services (related to rumours and myths)
    Disruption or anticipated disruption on supply chain of vaccines
  - Disruption or anticipated disruption on supply chain of vaccines
     Reports of immunization services de-prioritized under Covid-19
  - Reports of immunization services de-prioritized under Covid-19 amidst fears of health services becoming 'hot spots' for virus spread
  - Limited surveillance of immunization servicesLack of funding/resources
- Reduced mobility (of both caregivers and health care works) due to lockdown/social distancing policies as well as limited transportation\*

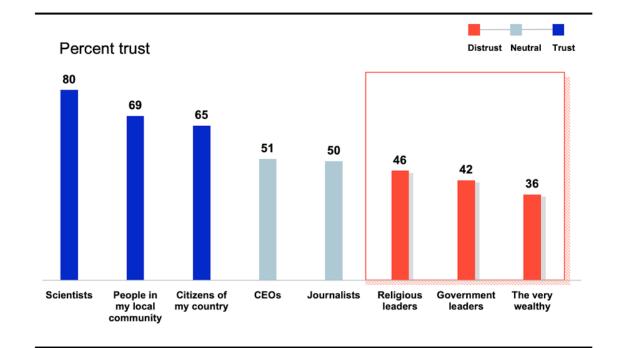
# SOCIETAL LEADERS NOT TRUSTED TO ADDRESS CHALLENGES

"

I do not have confidence that our current leaders will be able to successfully address our country's challenges

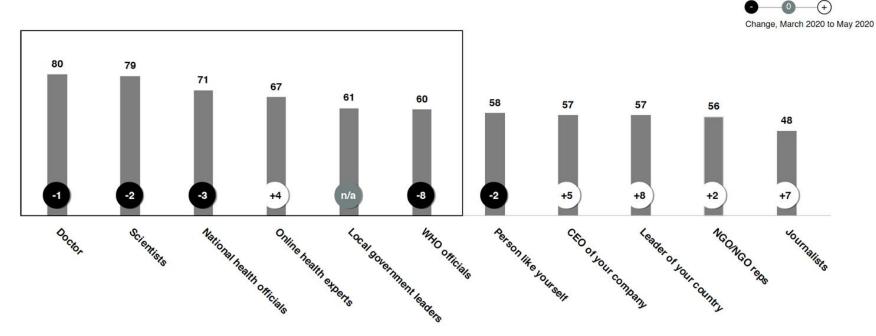
"

66%



#### A CALL FOR EXPERT VOICES

Percent who trust each to tell the truth about the pandemic



2020 Edelman Trust Barometer Special Report: Trust and the Coronavirus. Q13. Please indicate how much you trust each of the following sources to tell you the truth about the virus and its progression. 9-point scale; top 4 box; trust. Question shown to those who have heard of the virus (Q1/1). 7-mkt avg. "My employer CEO," "HR executive," "Sr. executives," and "Co-workers" were only asked of those employed (Q43/1). Data collected between March 6 and March 10, 2020.

2020 Edelman Trust Barometer Spring Update. CV1\_Q13. Please indicate how much you trust each of the following sources to tell you the truth about the virus and its progression. 9-point scale; top 4 box, trust. General population, 7-mkt avg.



#### Transparency

"With the lock-down, residents do not believe that health facilities would be opened for services."

#### Nigeria/Province, Sub-national

"The disruption is mainly related to the reluctance of populations to use immunization services because of false rumors on social networks about the introduction of a COVID19 vaccine being tested in African countries."

#### Mali, Ministry of Health (MOH), Sub-National Level.

"People are refusing to bring their children for vaccination because of the myths that the BCG, measles and other vaccines are products of the COVID-19"

#### Sierra Leone, District level

generate demand for vaccination

Caregivers may be reluctant to come to health facilities for immunization due to fear of COVID-19 infection 68% / 419 rest

Health workers may have concerns about their own safety while conducting immunization sessions

Inadequate communications and community engagement to 37% / 229 rest

Pulse survey