

How has Israel managed to vaccinate so many people so quickly? A thread on how (1) ample supplies, (2) targeted campaigns, (3) logistics, (4) digital technologies, (5) flexibility, and (6) universal healthcare w an element of competition helped them get ahead of everyone else.

First a reminder (in case you're not confronted with this every day by <u>@MaxCRoser</u> & <u>@OurWorldInData</u>): Israel is vaccinating ~150k people/day. The Health Minister is looking into switching *f* centres to 24-hour operations in order to increase the pace to 200k/day.



While the country is in the middle of a huge wave of infections, the majority of its most vulnerable have already received their 1st 💉 , a unique achievement so far. Clinics are giving 2nd doses atm and will resume w first doses as new shipments arrive. So what's the secret?



(1) SUPPLY. Israel has enough doses available from just Pfizer and Moderna to cover its entire population. Israel signed on Moderna very early (June) but was late to agree with Pfizer (November). How come they still get so many doses deliveried already?

Israel paid a premium, somewhere bw two to three times the market price. But acc to the financial magazine <u>@globesnews</u>, Israel figured it had something even more valuable to offer than cash: data.



Israel has committed to sharing data incl about side effects, efficacy, time to develop antibodies broken down acc to age, gender, preexisting conditions etc. The country basically acts as a large, real-world lab for manufacturers and the rest of the **C**.





(2) PUBLIC OUTREACH. Were Israelis more pro-vaccine than others? Not at all. According to surveys, only ~50% of the general public and ~60% of HCWs wanted to take the COVID-19 vaccine. So the pro-vaccination campaign had to start early & with special focus on the skeptical.

The Health Ministry set up special teams to target the Ultra-Orthodox, East Jerusalem, Arab communities in the north, Bedouins & Russian speakers as well as a team to identify misinformation and work with tech companies on nipping its spread in the bud.



The Ministry of Health produced a series of 1-minute videos in 4 languages (Hebrew, Arabic, Russian, Amharic) on subjects like the efficacy of the vaccines or the nature of mRNA technology. You can watch them here:





They also enlisted some "influencers" to work the public or their respective communities. Here are some of them.





Surely a rabbinical sign-off helped: Rabbi Yitzchok Zilberstein (87), a leading ultra-Orthodox authority, issued a ruling stating the "medicine should be taken." Previously, he held discussions with the Head of Innovation at <u>@ClalitHealth</u>.



לאחר התייעצות עם פרופ' רן בליצר: הרב יצחק זילברשטיין פסק להתחסן לקורונה בכיר הפוסקים הרב יצחק זילברשטיין קובע: "הסיכון של החיסון הוא מזערי לעומת הסכנות הרבות של מגפת הקורונה

https://www.inn.co.il/news/461793



It also helped that <u>@IsraeliPM</u> went all in: he got vaccinated on live TV, toured the vaccine storage site, claims to have called <u>@pfizer</u> CEO Albert Bourla 17 times so far, and recently visited a clinic in an Arab town where he encouraged locals \*in Arabic\* to take the vaccine.



Prevention
Preveni



On Thursday, he visited a vaccination center in the town of Tira, in central Israel, to encourage a higher turnout among the country's Arab minority. Arab citizens, who make up a fifth of the population, have been more hesitant than others to get the vaccine.

"We brought millions of vaccines here, more than any other country in the world relative to its population," Mr. Netanyahu said, adding, "We brought them to everyone: Jews and Arabs, religious and secular."

"Come and be vaccinated," he urged in Arabic.

As more and more people got the vaccine, fear of missing out (also known as becoming a "frayer," i.e. a sucker) kicked in and willingness shot up. Facebook and whatsapp groups were created to steer members to clinics w excess capacity on any day.





(3) LOGISTICS: vaccines arrive to the airport in Tel Aviv, move to freezers in <u>@tevapharm</u>'s storage facility, and are distributed on to clinics, pop-up vaccination centres, or even the six-meter long, freezer-equipped caravans that function as mobile vaccination units.



The vaccines are handled by SLE, the logistics unit of <u>@tevapharm</u>. Their freezers can hold up to 5 million *f* doses. All of this was in place by November. (having a local pharma giant & a population trained in military precision must've helped)





Every resource was enlisted to make the  $\checkmark$  work. "The Rabin Square complex was a joint effort between the local hospital, which provided the medical staff, and the Tel Aviv municipality, which paid a private events company to build and operate the site."



Israel has so far managed to vaccinate some 70 per cent of those over 60 years old, in addition to a sizable segment of those with pre-existing medical conditions https://www.theglobeandmail.com/opinion/article-what-the-world-can-learn-from-israels...

(4) DIGITALIZATION: Digitized medical records allow HMOs to identify those most at risk and proactively contact them. It also makes administration much easier & faster. (Would be curious in an experts' opinion if what's described by <u>@davidhorovitz</u> cld happen under <u>#GDPR</u> at all).

I'm close to, but not yet over 60, but Maccabi is now vaccinating over 55s with medical issues, and my very mild asthma apparently counts, since I was texted by Maccabi to make an appointment along with my wife. And we were then permitted to schedule that appointment together with the one already set for my parents, who are both in their late 80s.

People can book appointments for their vaccination by phone or on the HMO websites or in apps (this absolutely blows this European's mind). Acc to a friend working in an EMT unit vacintating the elderly, pre-  $\checkmark$  admin takes cca 1 minute and is done with the help of "mini tablets".





(5) FLEXIBILITY The strategy gets adjusted on the go. Israel authorized the use of the 6th dose in Pfizer vials Dec 24. To ensure minimum waste, at the end of the day, leftover  $\mathscr{I}$  are administered to anyone within reach, no matter whether they are in the priority group or not.

The above mentioned SLE repackages doses into bundles as small as 100 doses (the now famous "pizza-sized boxes") allowing easier supply to small clinics and mobile units along with the hospitals and large centres.



Pizza-sized boxes and paying a premium: Israel's COVID-19 vaccine ro... Order early, pay a lot, digitise distribution and stretch the supply. https://www.reuters.com/article/us-health-coronavirus-israel-vaccination/pizza-sized-bo...



While Israel experiences slowdowns on Shabbat, it doesn't halt the campaign for religious reasons. It angered some haredim, but the Health Minister cited "pikuah

nefesh," the principle that saving human life overrides virtually any other religious rule.



(6) HEALTHCARE. A functioning healthcare system is clearly the pre-requisite that made all the other factors work. Israel has universal, and virtually free, healthcare with 4 national HMO's competing to enroll members.



Small wonder: How Israel rolled up its sleeves and became vaccinatio... Leading in COVID-19 inoculation, the country's small size, high efficiency, and a healthy dose of chutzpah has it on its way to herd immunity; just don't believe every bit of hype

https://www.timesofisrael.com/small-wonder-how-israel-rolled-up-its-sleeves-and-beca...

Unlike the US, where healthcare is privatized and payment is made through a web of employer-provided insurance schemes, Israeli healthcare is simple, overwhelmingly public and practically free. Unlike the UK, where the nation is served directly by the National Health Service, Israel's four health maintenance organizations (HMOs) compete for prominence and patients, which pushes them to perform well.

Finally, a less tangible factor that no doubt played a role: Israel's entire history is one of fighting for survival. When they say stgh is treated as an "emergency" or a "war," they know what that means. This is a beautifully told reflection on that. https://www.bloomberg.com/opinion/articles/2021-01-01/covid-vaccination-miracle-has-brought-israel-back-to-its-roots

p.s. These photos are from a friend who is part of a 10-member EMT unit vaccinating 900-1000 people/day (!) in retirement homes. She says their arrival is treated like a festivity everywhere they go.



. <u>@threadreaderapp</u>, unroll please

cc <u>@andreafeigl1</u>, you might be interested in this. There's soo much for Europeans and the US to learn from this example.

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