To my valued patients

A quick comment

We now have a Zoom account for those wanting to videoconference. In order to use Zoom for a videoconference:

- 1. Download the Zoom application from your Apple, Android or Microsoft store and install on your phone, tablet or your computer.
- 2. Call us at 310-859-9170 and provide us your email address.
- 3. We will set-up an appointment and provide you with a link via email that you can simply click on at the appointed time.

Published data on the Chinese outbreak from The Lancet medical journal

I thought some of you might find new coronavirus data reassuring, particularly the younger crew. There is a new study in Lancet Infectious Diseases that models the case fatality ratio (a fancy name for rate of death). This British study is the first comprehensive examination of estimated mortality from mainland China. The key findings were:

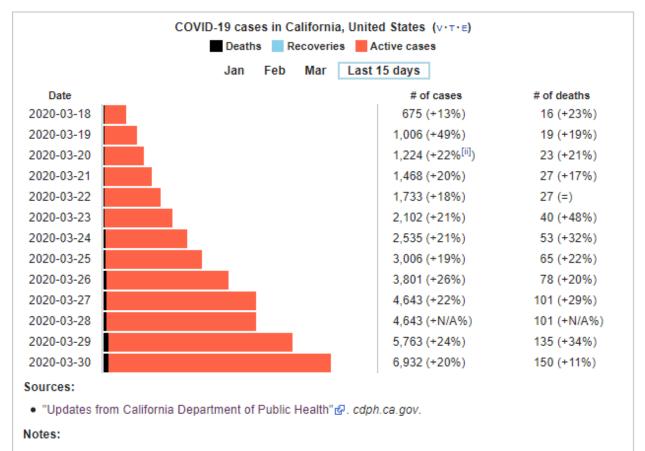
- The death rate from confirmed COVID-19 cases is estimated at 1.38%, while the overall death rate including unconfirmed cases is 0.66%.
- Deaths rates vary substantially, ranging from .0016% among those aged 0 through 9 years, and 7.8% for those aged 80 and above.
- Hospitalization rates were 0.04% for 10-19-year-olds, 1.0% for people in their 20's, 3.4% for people aged 30-39. 4.3% for people in their 40's and 8.2% for 50's. For people over 80 more than 20% required hospitalization.

*** Important note from me – I would consider the estimates above a worst-case scenario. China does not have state-of-the art healthcare facilities like those in the United States. Many, many Chinese are smokers and live in smoke-choked smoggy cities. I believe that the statistics in the United States will be more positive than those in China.

Local data

Good news on coronavirus trends at a local hospital. The most recent data appears to show a leveling off of the number of cases. We will need many more days to determine if this is a "blip" in the data or an actual leveling off. If it is true that the number of cases is leveling off, it is a good indication that the current social distancing policies are having a positive effect.

On a whole, California cases are still growing. Here is a graph for the state



- i. ^ On March 14, 2020, CDPH started reporting the numbers as of 6 PM instead of 8 AM. More cases may be reported due to a longer reporting interval that is more than 24 hours (i.e. 34 hours).
- ii. ^ On March 20, 2020, CDPH started reporting the numbers as of 2 PM instead of 6 PM. Fewer cases may be reported due to a shorter reporting interval that is less than 24 hours (i.e. 20 hours).

<u>Is favipiravir effective?</u>

Unfortunately, again, I must quote Chinese data. In a small study comprised of 35 people with a confirmed diagnosis of COVID-19, patients took favipiravir plus inhaled interferon. Compared to the control group, the favipiravir group showed significant improvement in chest imaging, with improvement rates 91% in the favipiravir group vs. 62% in the control group. It should be noted that patients in the treatment group were younger than those in the control group. But if these results are replicated, there may be possible benefits for some of existing anti-viral agents.

Myths

I saw an article in Medical News Today that explored current myths surrounding the coronavirus. I thought I would place some of them in this newsletter for us to be able to sort fact from fiction.

1. Spraying chlorine or alcohol on skin kills viruses in the body.

Applying alcohol or chlorine to the body can cause harm, especially if it enters the eyes or mouth. Although people can use these chemicals to disinfect surfaces, they should not use them on skin. These products cannot kill viruses within the body.

2. Hand dryers kill coronavirus.

Hand dryers do not kill coronavirus. The best way to protect yourself and others from the virus is to wash your hands with soap and water or an alcohol-based hand rub.

3. Rinsing the nose with saline protects against coronavirus.

There is no evidence that a saline nose rinse protects against respiratory infections. Some research suggests that this technique might reduce the symptoms of acute upper respiratory tract infections, but scientists have not found that it can reduce the risk of infection.

4. Parcels from China can spread coronavirus.

From previous research into similar coronaviruses, including those that cause SARS and MERS and are similar to SARS-CoV-2, scientists believe that the virus cannot survive on letters or packages for an extended time. The CDC explains that "because of poor survivability of these coronaviruses on surfaces, there is likely very low risk of spread from products or packaging that are shipped over a period of days or weeks at ambient temperatures."

5. The virus will die off when temperatures rise in the spring.

Some viruses, such as cold and flu viruses, do spread more easily in the colder months, but that does not mean that they stop entirely when conditions become milder. As it stands, scientists do not know how temperature changes will influence the behavior of SARS-CoV-2.

6. Flu and pneumonia vaccines protect against COVID-19.

As SARS-CoV-2 is different than other viruses, no existing vaccines protect against infection.

There are additional myths and if you want you can read them at https://www.medicalnewstoday.com/articles/coronavirus-myths-explored

Our "art and medicine" project continues



From Wikipedia

The Anatomy Lesson of Dr. Nicolaes Tulp is a 1632 oil painting on canvas by Rembrandt. The painting is regarded as one of Rembrandt's early masterpieces.

In the work, Dr. Nicolaes Tulp is pictured explaining the musculature of the arm to medical professionals. Some of the spectators are various doctors who paid commissions to be included in the painting.

The event can be dated to 31 January 1632: the Amsterdam Guild of Surgeons, of which Tulp was an official City Anatomist, permitted only one public dissection a year, and the body would have to be that of an executed criminal.

Anatomy lessons were a social event in the 17th century, taking place in lecture rooms that were actual theatres, with students, colleagues and the general public being permitted to attend on payment of an entrance fee. The spectators are appropriately dressed for this social occasion. It is thought that the uppermost (not holding the paper) and farthest left figures were added to the picture later.

Every five to ten years, the Surgeon's Guild would commission a portrait by a leading portraitist of the period; Rembrandt was commissioned for this task when he was 26 years old, and newly arrived in Amsterdam. It was his first major commission in Amsterdam. Each of the men included in the portrait would have paid a certain amount of money to be included in the work, and the more central figures (in this case, Dr. Tulp) probably paid more, even twice as much. Rembrandt's anatomical portrait radically

altered the conventions of the genre, by including a full length corpse in the center of the image (using Christ-like iconography) and creating not just a portrait but a dramatic Mise-en-scène. Rembrandt's image is a fiction; in a typical anatomy lesson, the surgeon would begin by opening the chest cavity and thorax because the internal organs there decay most rapidly.

One person is missing: the Preparator, whose task was to prepare the body for the lesson. In the 17th century an important scientist such as Dr. Tulp would not be involved in menial and bloody work like dissection, and such tasks would be left to others. It is for this reason that the picture shows no cutting instruments. Instead we see in the lower right corner an enormous open textbook on anatomy, possibly the 1543 De humani corporis fabrica (Fabric of the Human Body) by Andreas Vesalius.