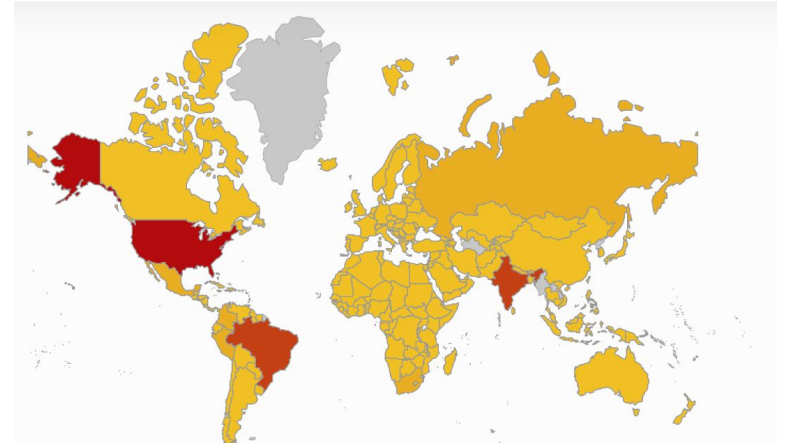
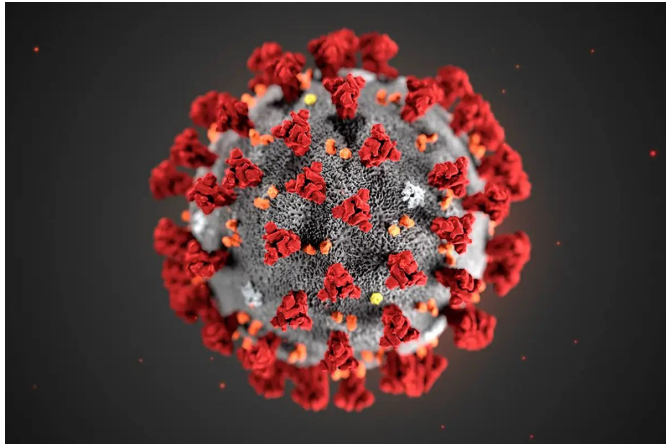


An Analysis on COVID-19 Preparation and Management

Asma Poshni

COVID-19 Background Information

- Emergence of COVID-19 in Wuhan City, China
- Zoonotic origin
- Transmission
 - How did the virus spread so vastly and quickly?
- COVID-19 in the United States

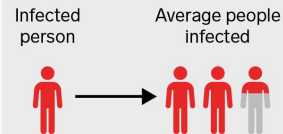


What is R-naught?

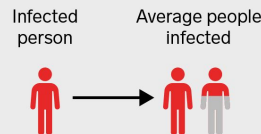
- What is the role of the R-naught value?
- What is the R-naught of COVID-19?
- How can governments use R-naught?

The average number of people that one person with a virus infects, based on the R0 scale

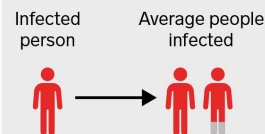
COVID-19: 2–2.5*



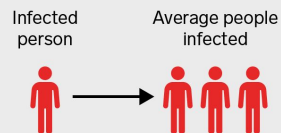
H1N1: 1.2–1.6



Ebola: 1.6–2



SARS: 2–4



MERS: 2.5–7.2**



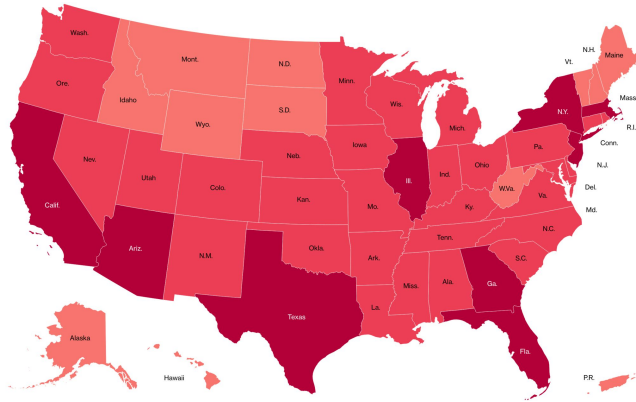
*As of February 28, 2020 **R0 calculated solely during the 2015 outbreak in South Korea

Sources: ScienceMag; WHO; Journal of the ISIRV

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Analysis of the United States' COVID-19 Response/Preparation

- Initial response
 - What is necessary for a country to prepare?
- United States' PPE control



How the United States' Healthcare System Prepared

- Importance of strong leadership
- Limit number of people in hospitals
- Protection methods



Analysis of Oral and Maxillofacial Surgeon's Practice's Response

- Initial response to the pandemic
- After 2 months of staying closed
- New COVID-19 conscious procedures
 - Be aware of surgeries releasing bioaerosols
 - Training plans
 - New PPE

Affiliated OMS's COVID-19 Screening Procedure

- Questionnaire (3 times)
- COVID-19 test
 - Issued only to patients receiving a surgery that releases bioaerosols
 - Nasopharyngeal PCR swab test

Data

- .006% of patients indicated that they had either travelled or exhibited symptoms of COVID-19
- 137 patients needed an invasive surgery resulting in the release of bioaerosols

	Location			
	<u>Olney, MD</u>	<u>Rockville, MD</u>	<u>Mount Airy, MD</u>	<u>All locations</u>
Total Questionnaire Positives	5	10	0	15

	Location			
	<u>Olney, MD</u>	<u>Rockville, MD</u>	<u>Mount Airy, MD</u>	<u>All locations</u>
Total Tests Administered (Tests only given to patients receiving surgeries resulting in the release of bioaerosols)	24	82	31	137
Positive Test Results	0	0	0	0

Challenges

- My initial internship was cancelled after I spent time preparing
 - Although I gained valuable knowledge
- Shift in my topic
 - Initially, I wanted to focus on the epidemiology of COVID-19, but as I continued researching and writing, I found myself really interested in the preparation and management of COVID-19

Thank you to...

- Dr. Krug
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- Affiliated Oral and Maxillofacial Surgeons of Maryland

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