

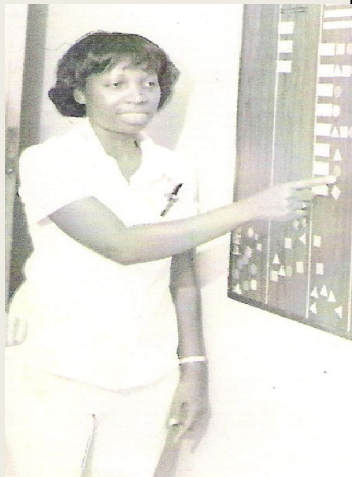
The COVID-19 Pandemic: Pulling Yourself Up by Your Bootstraps



Dr. A. Deloris Alexander
Prepared for the COVID-19 Educational Workshop
Tuskegee AHL Grant
Tuskegee Municipal Complex
Tuskegee, AL
May 17, 2022

About Me...

- From Tuskegee, AL (“Born and raised”)
- Both parents were 1st generation college students and graduates of Tuskegee, Institute.
- **Have a research lab that trained more than 200 students so far**
- Once honored by the White House



Moore

an

INTEGRATIVE BIOSCIENCES PHD PROGRAM



Dr. Jacqueline Triche
2012



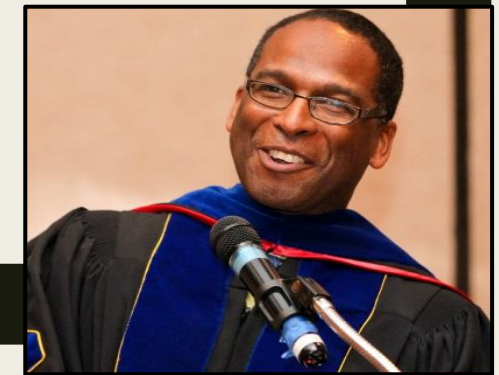
Dr. Melissa Jones
2012



Dr. Shaniece Theodore
2013



Dr. Venus Welch-White
2013



Dr. Eddy Cadet
2013

Community Service



RAVE2

Rural Alabama Vaccination, Education, and Events Project

- \$1M Grant from ADPH
- TO Tuskegee University
- Highly Collaborative
 - *Vaccinations*
 - *Education*
 - *PPE Distribution*



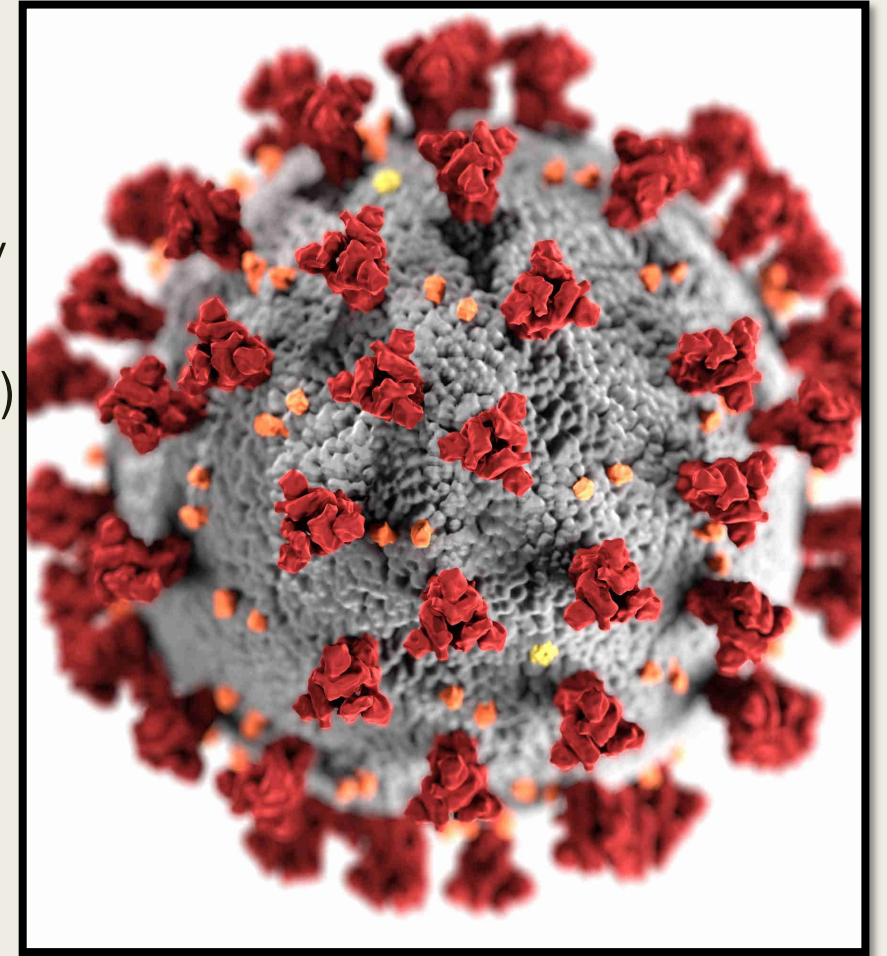
Pull Yourself up by Your Bootstraps Meaning



- Definition: To improve one's situation through hard work and self-determination, rather than getting assistance from someone else.
- Origin of Pull Yourself up by Your Bootstraps
- This expression originated in the 1800s. It refers to the ability of a person to lift himself or herself up by pulling on the laces of his or her boots. Of course, this is impossible, so in order to do it would take very hard work.
- The idiom refers to the fact that sometimes it takes hard work to overcome something or become successful, and sometimes the only person who can do that hard work is yourself. At some point, no amount of help or assistance can help someone. You simply need to pull yourself up by your bootstraps.

COVID-19

- Disease caused by RNA virus
- Agent is SARS-CoV-2 (Severe Acute Respiratory Corona Virus-2)
- >87% Homologous to SARS-CoV-1 (2002-2004)
- Designated a pandemic in March 2020
- Zoonotic disease (Bat plus intermediate host?)
- >97% Homologous to bat Coronavirus RaTG13
- Novel disease
- Not the only human Corona Virus
- Deadly



Symptoms of SARS-CoV-2 infection

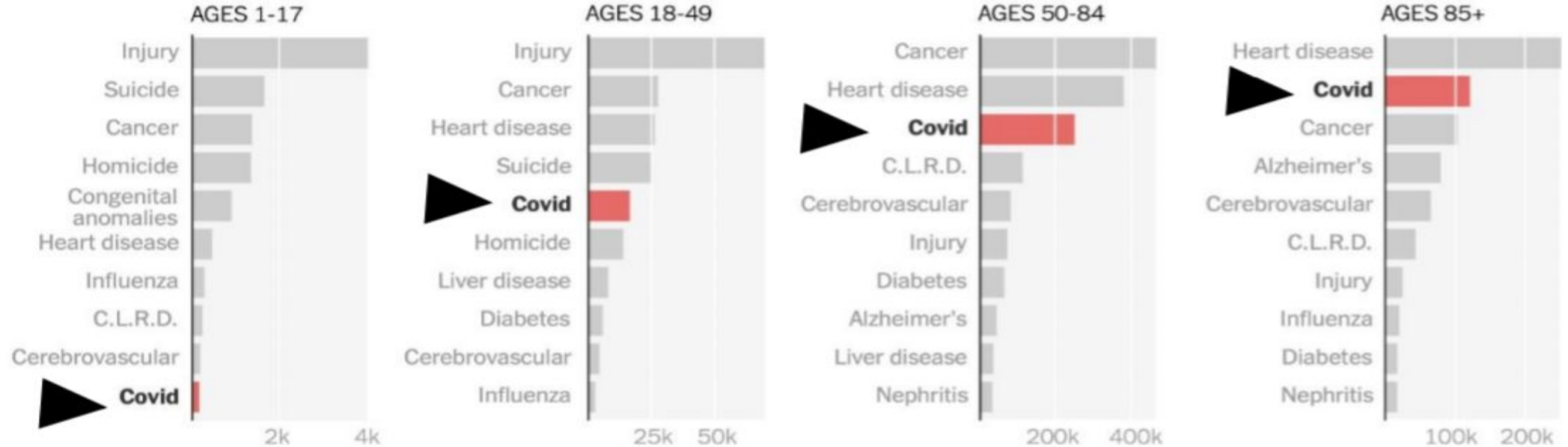
■ **Asymptomatic**

- Death
- Fever
- Fatigue
- Muscle pain
- Headache
- Loss of appetite
- Cognitive/Memory changes
- Diarrhea
- Shivering
- breathing difficulties
- hypoxia-low levels of oxygen in the blood
- High temperature
- A continuous, dry cough
- Loss of the sense of taste and smell.

Leading causes of death have shifted...

Covid among the top five causes of death among adults. Among kids, it ranks 10th.

Leading death cause by age group



Notes: C.L.R.D. is chronic lower respiratory disease. Covid death data for 2020, other causes data for 2019. - Source: C.D.C.

[https://www.thelancet.com/journals/lanhiv/article/PIIS2352-3018\(20\)30305-2/fulltext](https://www.thelancet.com/journals/lanhiv/article/PIIS2352-3018(20)30305-2/fulltext)

Slide courtesy of Dr. Ian Moore

Why Do I Care About COVID-19

Alabama, Marriage Indexes, 1814-1935 for Ida Griffin

Coffee - Dallas

Save

J. E. Evans, A. Z. Newsome, Jan 23, 1895, Z. T. Marsh, J. P.
R. J. Freeman, Carry E. Peacock, Jan 25, 1893, G. N. Winslett,
C. C. Byrd, Zina Yelverton, Jan 23, 1894, P. L. Wesley, M. G.
M. M. Gunter, Lula Sullivant, Jan 25, 1894, C. L. Mathews, M. G.
T. R. Myers, Gracie McCartha, Jan 28, 1894, J. R. Levy, J. P.
Daniel G. Purswell, Mary E. Bryan, Jan 25, 1894, J. C. Ross, J. P.
C. W. Monk, Ella Sketoe, Jan 25, 1894, C. M. Whittle, M. G.
Handy Peters, Emma McClendon, Jan 23, 1894, M. V. Marshall, M. G.
S. H. Windham, Leonora Milligan, Jan 31, 1894, G. N. Winslett.
Luke Chapman, Flayella Gilmore, Jan 28, 1894, W. M. Mullins, M. G.
J. A. Sowell, Lucy Harris, Feb 4, 1894, S. Williford, M. G.
J. H. Ford, Delia L. Ardis, Feb 1, 1894, J. E. Griffith, J. P.
Gus Thomas, Susan Rogers, Feb 18, 1894, A. A. Smith, M. G.
Calvin Dick, Blanch Everett, Feby 1, 1894, John Dowling, L. P.
J. O. Snell, Margaret Gissendanner, Feb 2, 1894, Sandy McLane, M. G.
Wm. Snell, Eliza Harper, Feb 26, 1894, W. A. Lewis, J. P.
J. J. Cain, Fannie Peacock, Issued Feb 4, 1894.
William Jones, Ada Brooks, Feb 6, 1894, W. W. Morris, P. J.
J. D. Bagwell, Martha A. Newton, Feb 8, 1894, M. V. Marshall, M. G.
J. W. Sketoe, Minnie Anderson, Feb 11, 1894, C. M. Whittle, M. G.
Joseph Wright, Georgia Ann Cassady, Feb 16, 1894, D. B. Sturtary.
Zach Carroll, Emma Gilmore, Feb 15, 1894, J. H. Whaley, M. G.
Cas Smith, Ida Griffin, Feb 17, 1894, W. W. Morris, P. J.
Charley Attaway, Ada Thurman, Feb 21, 1894.
Sis York, Mattie Bailey, Feb 22, 1894, D. Peeples, M. G.

Save to person in your tree

Save to your computer...

Save to your Shoebox

The “Worst” Pandemic in recorded history



1918-1920 Influenza pandemic

- Agent: H1N1
- Global Population: 1.8 billion
- Deaths (Global): 20-50 million
- US Population: 103 million
- Deaths (US): 675,000

2019-2022 COVID pandemic

- Agent: SARS-CoV-2
- Global Population: 7.9 billion
- Deaths (Global): 3.8 million
- US Population: 331 million
- Deaths (US): 613,052

US Census Bureau, ourworldindata.org, cdc.gov, worldometers.info

Why African-Americans were likely to die during the 1918-1919 Pandemic:



<https://www.history.com/news/1918-flu-pandemic-african-americans-healthcare-black-nurses>

“...pandemics have always disproportionately affected Black, indigenous and Latinx people..” Lakshmi Krishnan

- “When it came to getting healthcare during the 1918 influenza epidemic, America’s Black communities, hobbled by **poverty**, Jim Crow segregation and rampant **discrimination**, were mostly **forced to fend for themselves**. Opportunities for hospital care proved scarce, leaving many relying on family care and, where available, the small but burgeoning ranks of Black nurses.
- When the 1918 influenza epidemic began, African Americans were already beset by a barrage of social, medical and public health problems, asserts **Vanessa Northington Gamble**. Among the challenges she identified in her 2010 study of the African American experience of the 1918 flu pandemic: ‘racist theories of black biological inferiority, racial **barriers in medicine and public health, and poor health status.**’”

Fending for Ourselves...

“Health historians paint a picture of heroic efforts by handfuls of Black nurses and physicians working to serve their community. They also acknowledge the role of black churches, women’s groups, newspapers and community leaders in stressing education and prevention, and in mobilizing local volunteers.

“There was a very community-driven response to secure the health of Black people who were ill and to also to make sure they realized that this was a serious illness,” says S. Michelle Ogunwole, general internal medicine fellow at the Johns Hopkins School of Medicine and co-author of “Historical Insights on Coronavirus Disease 2019.”

Why African-Americans are likely to die during the 2019-2022 Pandemic:



Why African-Americans are likely to die during the 2019-2022 Pandemic:

FOCUS ON AFRICAN- AMERICANS

Lives lost to date

- 142,361 Black Americans are known to have lost their lives to COVID-19 through April 30, 2022.
- There were 1,431 new deaths reported among Black Americans for the last full month of data (March 2022), which is a 74% decrease from the preceding month (5,431).
- Nationwide, Black Americans have experienced 14.3% of all deaths, while they represent 12.6% of the population.

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Fending for Ourselves:

- Townhall meetings
- Workshops
- Vaccine/Testing Clinics
- Research/Clinical Findings

- **Dr. Ian N. Moore DVM, PhD, DACVP**

(Chief, Infectious Disease Pathogenesis Section, National Institutes of Health)

-**Dr. Deanah Maxwell -Stafford, MD**

(Family Medicine, Tuskegee, AL and associate, AL Depart. Of Public Health)

www.edi.nih.gov, covid19community.nih.gov, www.vitals.com,
www.alreporter.com



COVID-19 Community Outreach, with the Alabama Department of Public Health



Macon County Community Partners Task Force

COVID-19 VACCINE TOWN HALL

THURSDAY, FEBRUARY 25, 2021 AT 7PM VIA ZOOM
VISIT WWW.MACONCARE.ORG TO GET THE LINK.

- DO YOU HAVE QUESTIONS ABOUT COVID-19 VACCINES?
- WONDERING WHETHER THE VACCINES ARE SAFE?
- CONCERNED ABOUT POTENTIAL LONG-TERM CONSEQUENCES OF GETTING THE SHOT?

ISSUES INVOLVING THE VACCINES ARE SO IMPORTANT, WE HAVE ASSEMBLED PROFESSIONALS TO ADDRESS YOUR CONCERNS.

Jacquelin Brink Superintendent Macon County Schools	Anthony Bryant Jones Tubbergen Enterprise	Dr. Debra Hill Macon County Health
Dr. Rochelle Maxwell Family Medicine M.D.	Dr. Debra Alexander Tubbergen Enterprise	Pastor Lawrence Russell Pastor/Deacon, Macon County Andrew's Church

Medical Mistrust and Health Disparities in Communities of Color

MLK DAY OF SERVICE WEBINAR

THEME:
A Deep and Bold Discussion of the Role of (or the Lack of) Vaccine

PRESENTERS:
Dr. Debra Maxwell, Barbara K. Dr. Debra Alexander

UPDATED

NOGL FOUNDATION

JAN 18 2021 6 PM CST

Dr. Maxwell-Stallard **Dr. Alexander**

(334) 226-3063
National GL Foundation, Inc.
Tuskegee, Alabama

<https://us02web.zoom.us/j/8306278325?pwd=SWpFTzVhdUppOjBBL3RlTEUwRjRvZz09>

[www.edi.nih.gov,covid19community.nih.gov,](http://www.edi.nih.gov,covid19community.nih.gov)

COVID and Health Disparities

- COVID-19, Deadly Disease
- US leads the World in COVID-19 related mortality
- COVID-19 is preventable
- Lot's of misinformation and DISTRUST of Governments and Doctors and Scientists
- Problems related to access and infrastructure especially affects vulnerable populations
- Allows health disparities to exist. We can do better.

COVID-119 Confusion, Mistrust, Misinformation, Vaccine Hesitancy

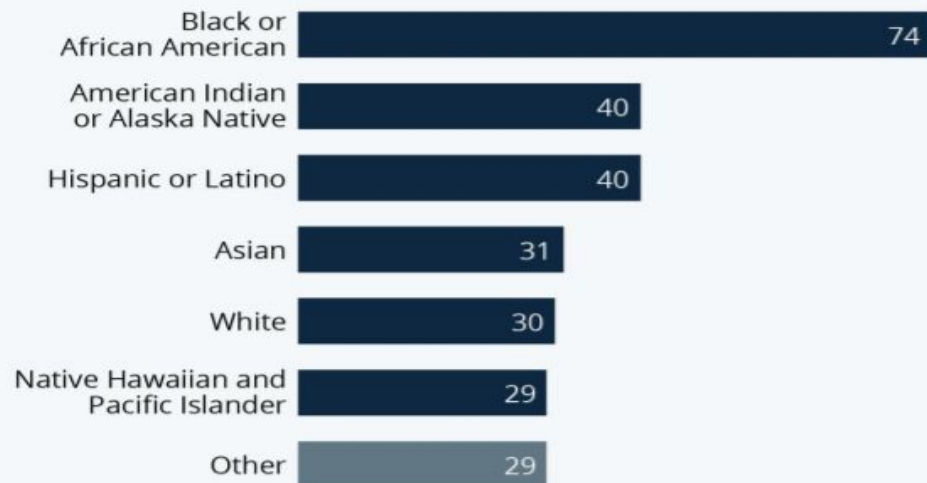


Health Disparities Exist for COVID-19

Impact of COVID on communities of color

The Pandemic's Racial Disparity

Covid-19 deaths per 100,000 people in the U.S. by race or ethnicity (as of July 30, 2020)



Source: The COVID Tracking Project

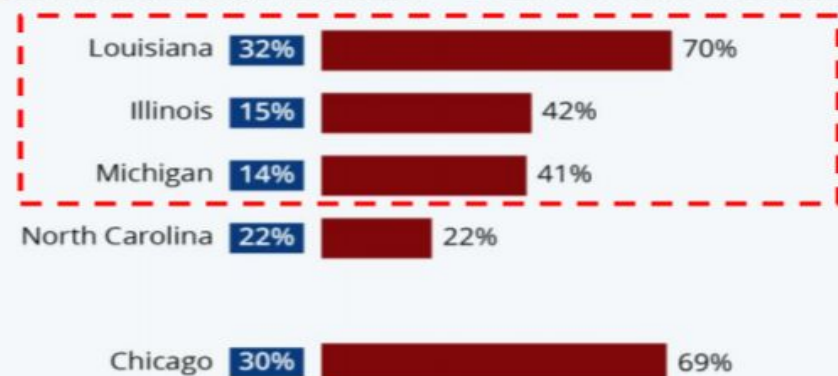


statista

COVID-19's Devastating Impact On African Americans

African American share of state/city populations and COVID-19 deaths (as of Apr 06, 2020)

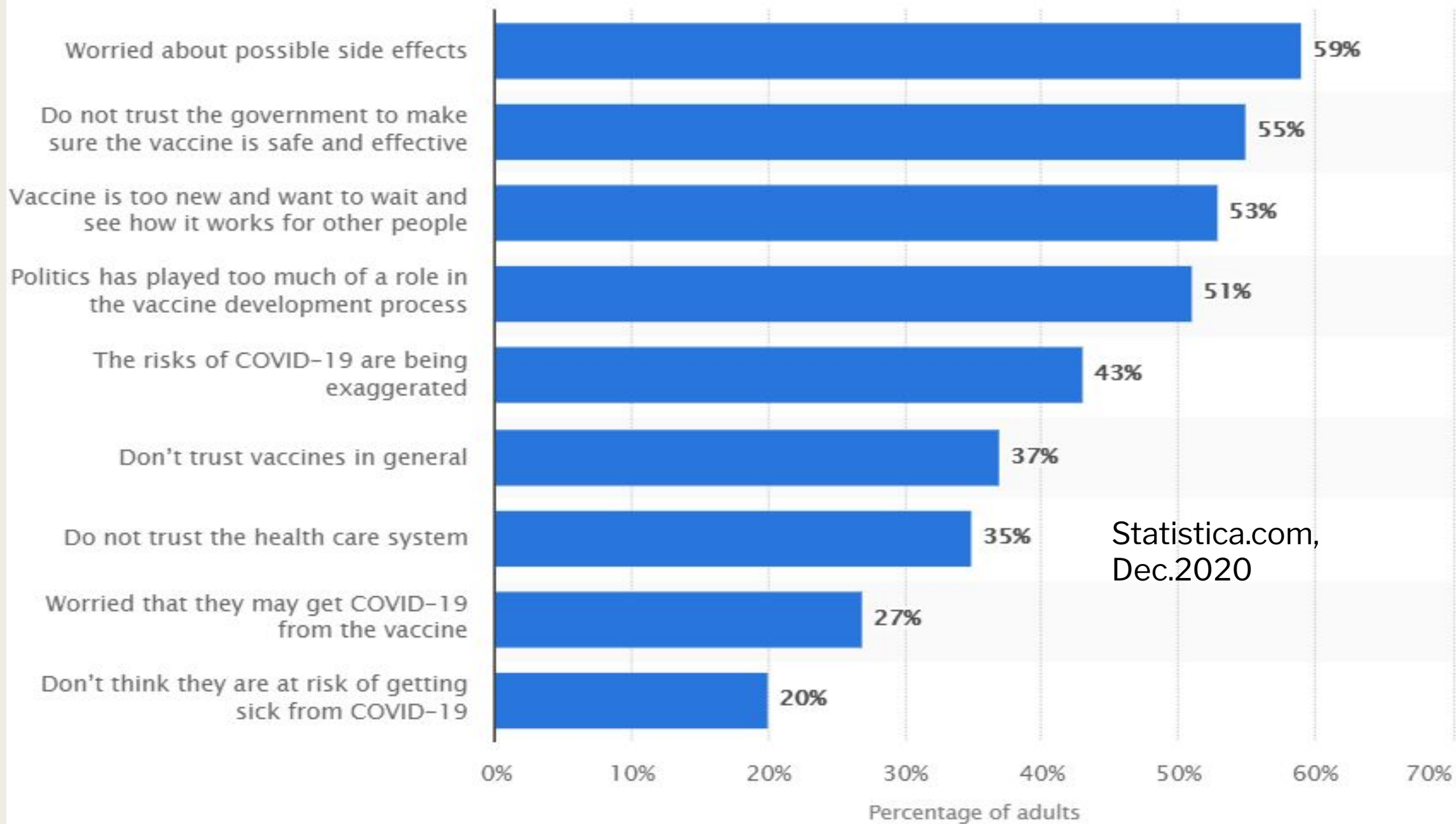
■ Share of state/city's population ■ Share of COVID-19 deaths



Sources: 2010 Census, respective state/city health departments



statista



The USPHS Study of Untreated Syphilis in the Negro Male aka “Tuskegee Experiment” aka “The Tuskegee Syphilis Study”

- **NOT** a significant reason for health disparities related to COVID-19
- Fear of Side effects
- DISTRUST of the system



(Slide modified from Dr. Ian Moore, NIH, Bethesda, MD)



-Give everyone equal access to the **FACTS** and **ACCURATE** information so they can make an informed decision

-**Post-pandemic:** A future where **WE** are intentional and involved in preventative healthcare decisions for ourselves and our families and active in clinical trials (HBP and Diabetes)



(Slide courtesy of Dr. Ian Moore, NIH, Bethesda, MD)

The FACTS/TRUTH of the matter is...

- As of May 4, 2021: US= 680 deaths/day (almost 100% in unvaccinated); preventable
- Out of 95 million fully vaccinated (Pfiz/Mod) ~9K cases of mostly mild symptomatic infection (0.009%; or 99.991% protection from COVID)
- Need for vaccinations (NOW)
- New variants/ to come?
- Largest spread, and now hospitalization, among young people (18-30)
- HBCUs and vaccination; special importance
- Events of the past overruling our better judgment

Pulling Ourselves Up by Our Bootstraps

1. Vaccinations

- Had them for almost 100 years
- Key to increase in human population and longer life spans
- Greatly reduced, and in some cases almost eliminated deaths from childhood diseases
- Generally Safe and Effective



Pulling Ourselves Up by Our Bootstraps

2. Wear A Mask

- N95 or KN95
- Protects from other respiratory diseases as well
- Still available at some pharmacies, health departments, RAVE2
- Helps with allergy season
- Type of Mask is the key, based on exposure



Pulling Ourselves Up by Our Bootstraps

3. Wash/Sanitizer



Pulling Ourselves Up by Our Bootstraps

4.



Pulling Ourselves Up by Our Bootstraps

5. Quarantine zones to contain
infected



Quarantine Zone

No unauthorized admittance.



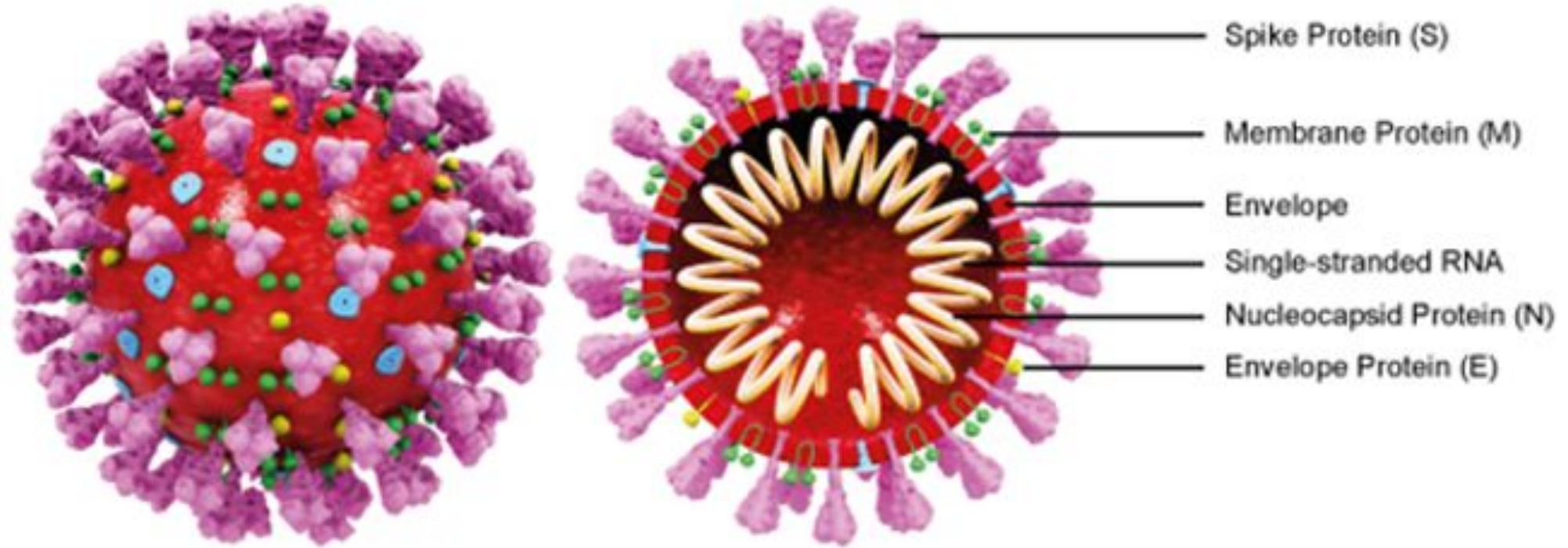
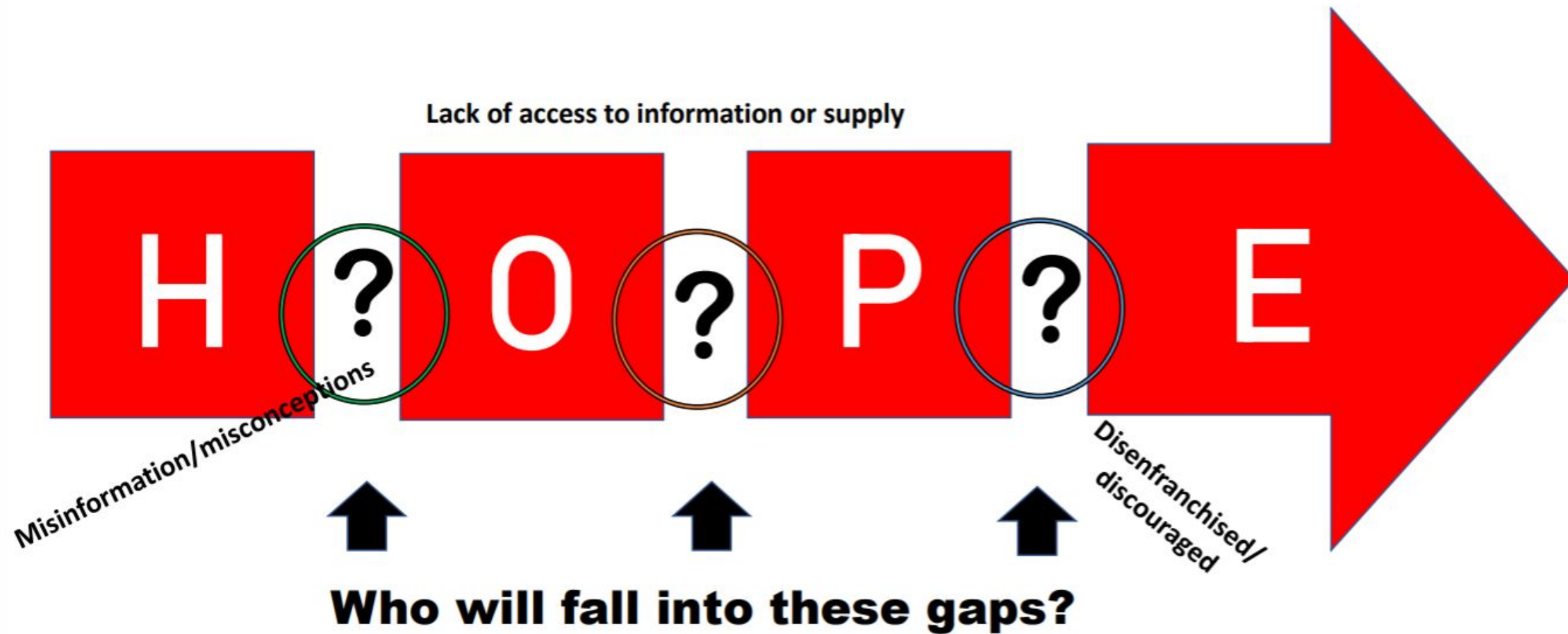


FIGURE 1: Schematic diagram of SARS-CoV-2.

■ AdipoGen Life Sciences

<https://adipogen.com/storeconfig/choose/store?destination=covid-19>

Positive direction: good news/good intentions/ good progress



(Slide courtesy of Dr. Ian Moore, NIH, Bethesda, MD)

Pulling Yourself Up by Your
Bootstraps:
Involves others helps others



Acknowledgements

- **Tuskegee University**
 - College of Arts and Sciences
 - College of Agriculture, Environment and Nutrition Sciences
 - College of Veterinary Medicine, Nursing and Allied Health
 - George Washington Carver Agricultural Experiment Station
- **Dr. Deanah Maxwell, Dr. Ian Moore**
- **RAVE2**
- **The AL Department of Health**
- **You**

Questions?

