COVID-19 as an Accelerant to America’s Health Disparities

…and What We Can Start to Do About It

January 2020
Health Disparities Before CV19

2005 REPORT: 14-Year Life Expectancy Difference:

- North Tulsa had 3 times the national rate of cardiovascular and cancer deaths.
- North Tulsa had 40% of region’s population but only 4% of region’s health programs.
- Focused efforts on access to care.
Case from 2010: Stress Kills

My First patient at the University of Oklahoma’s New Wayman Tisdale Clinic in North Tulsa:

- 26 year old, unmarried black man.
- Previously in a North Tulsa Gang. Able to get out but with lasting effects:
  - Difficult to treat Constant Anxiety and Hyper-vigilance.
  - Malignant Hypertension.
  - Age 28 - Chronic Kidney Failure on Dialysis.
- Died at Age 30.
BEFORE CV-19

NEIGHBORHOOD DIFFERENCES IN LIFE EXPECTANCY

New Orleans = 25 years
New York = 9 years
Richmond = 20 years
D.C. = 7 years
2015 – STUDY RESULTS : Tulsans with Mental Illness:

- Die 27 Years Earlier
- Average Life Expectancy = 49 years old
- Causes of Death – Cardiovascular Disease, Cancer
2015 Study on Burden of Mental illness and Addiction in Tulsa

- Drug Overdose Deaths = 17 / 100,000 in Tulsa
- Suicide = 17 / 100,000 in Tulsa
- Homicide = 12 / 100,000 in Tulsa
Drug, alcohol and suicide mortality, men and women ages 50-54

Before 2020

- "We have never seen demand for psychiatrists this high in our 30-year history. Demand for mental health services has exploded, while the number of psychiatrists has not kept pace."

- “By 2025, we expect the US to be short by 16,000 psychiatrists.”

Merritt Hawkins, November 2019

"Deaths of Despair"
Angus Deaton and Anne Case, Princeton University and Brookings Panel on Economic Activity, 2017
The Accelerant: COVID-19

Accelerant – A substance used to aid in the spread of fire (Oxford)
COVID-19 Does Not Discriminate?

Older
- 80 year old = 16% death rate

Underlying Illnesses
- Heart DZ = 11% death rate
- Pulmonary Dz = 7.3% death rate
- Diabetes = 6.5% death rate

Work and Housing Contributors:
- Essential Workers in Service Fields
- Crowded Housing
- Mass Transit
- Car-pooling

Los Angeles County Health Department and CDC, July 2020
COVID-19 Unveiled Our Existing Health Disparities and What Happens When You Stress Vulnerable Populations Further

Los Angeles’ Underlying Medical Conditions:

LA County Health Department

<table>
<thead>
<tr>
<th>Condition</th>
<th>Black</th>
<th>White</th>
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</thead>
<tbody>
<tr>
<td>Heart Disease</td>
<td>31%</td>
<td>15%</td>
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<tr>
<td>High Blood Pressure</td>
<td>28–45%</td>
<td>22%</td>
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<tr>
<td>Diabetes Mellitus</td>
<td>10%</td>
<td>5%</td>
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</tbody>
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New York City Frontline Workers, by Race and Ethnicity

- Grocery, Convenience, and Drug Stores: 39% Black, 24% White
- Public Transit: 9% Black, 41% White
- Trucking, Warehouse, and Postal Service: 27% Black, 22% White
- Healthcare: 16% Black, 32% White
- Childcare, Homeless, Food, and Family Services: 22% Black, 35% White
- Building Cleaning Services: 18% Black, 15% White

COVID-19: An Accelerant to US Health Inequities and Deaths

**Pre-COVID:** 16-year Difference in Life Expectancy Across CHICAGO. Pattern repeats across the US.

**2020:** Inadequate coverage, access to care, underlying medical conditions, service workers, crowded housing

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**COVID-19's Devastating Impact On African Americans**

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

<table>
<thead>
<tr>
<th>State</th>
<th>Share of COVID-19 deaths</th>
<th>Share of state/city's population</th>
</tr>
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<tbody>
<tr>
<td>Louisiana</td>
<td>70%</td>
<td>32%</td>
</tr>
<tr>
<td>Illinois</td>
<td>42%</td>
<td>15%</td>
</tr>
<tr>
<td>Michigan</td>
<td>41%</td>
<td>14%</td>
</tr>
<tr>
<td>North Carolina</td>
<td>22%</td>
<td>22%</td>
</tr>
<tr>
<td>Chicago</td>
<td>69%</td>
<td>30%</td>
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</tbody>
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Sources: 2010 Census, respective state/city health departments
COVID-19 Unveiled Our Existing Health Disparities and What Happens When You Stress Vulnerable Populations Further

<table>
<thead>
<tr>
<th>DEATH RATES / 100,000 by RACE</th>
<th>DEATH RATES by ECONOMIC STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>Affluent</td>
</tr>
<tr>
<td>= 34.7</td>
<td>= 13.1</td>
</tr>
<tr>
<td>Latinx</td>
<td>Poverty</td>
</tr>
<tr>
<td>= 34.5</td>
<td>= 51.2</td>
</tr>
<tr>
<td>Asian</td>
<td></td>
</tr>
<tr>
<td>= 17.1</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td></td>
</tr>
<tr>
<td>= 13.8</td>
<td></td>
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Los Angeles County Health Department and CDC, July 2020
Why Higher Death Rates for Blacks and Latinx?

“The very real impact of injustices plays out everyday…and amplifies why racism is a public health issue,” Dr. Barbara Ferrer, Los Angeles County’s public health director said.

“And the disproportionately of the impact of racism and discrimination on health and well-being.

We must look at the structure, systems and practices in our society to understand the root cause of these inequities, which really have much to do with a long history of institutional racism.” Los Angeles Times, June 2020
Why Higher COVID Death Rates for Blacks and Latinx?

Race and Policies:
1. Segregation by Neighborhood and Interstate
   ▪ *The Color of Law: A Forgotten History of How Our Government Segregated America*
2. Para-military Policing:
   ▪ *BLUE: The LAPD and the Battle to Redeem American Policing*
3. War on Drugs:
   ▪ *El Narco: Inside Mexico’s Criminal Insurgency*
4. Mass Incarceration
   ▪ *The New Jim Crow: Mass Incarceration in the Age of Colorblindness*
5. Essential Jobs as Only Options
6. Highly Stressful Living Environment

Impact on Health Disparities and Death Rates:
1. Poverty → Lower Pay, Longer Hours, No Insurance Jobs.
2. Poor Quality, Crowded Housing.
3. Food Swamps and Food Deserts.
4. Neighborhoods Unsafe to Exercise.
5. Incarceration of Parents
7. Impact of Stress → Expression of Genes, Hormones, Immune System
<table>
<thead>
<tr>
<th></th>
<th>Overall % Iowa of Population</th>
<th>Of COVID Positive in Iowa, Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>3%</td>
<td>9%</td>
</tr>
<tr>
<td>Latinx</td>
<td>6%</td>
<td>17%</td>
</tr>
</tbody>
</table>
## Indicators of Distress from COVID-19

<table>
<thead>
<tr>
<th>National Suicide Hotline</th>
<th>Alcohol Use</th>
<th>Substance Use</th>
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<tbody>
<tr>
<td>800% Increase in CALLS</td>
<td></td>
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<tr>
<td></td>
<td>54% increase in sales compared to 2019.</td>
<td>Marijuana Sales have increased significantly in medical and recreational approved states.</td>
</tr>
<tr>
<td></td>
<td>Online sales increased by 477% from February 2020 through May 2020.</td>
<td>US Customs and Border Patrol has seen increase in demand for Methamphetamine and increase in Methamphetamine overdose deaths during pandemic.</td>
</tr>
<tr>
<td></td>
<td>Increase in consumption:</td>
<td>After several years of improvements, 2019 and 2020 → Increase in Opioid and Methamphetamine Overdose Deaths</td>
</tr>
<tr>
<td></td>
<td>16% Overall, 25% Young and Middle Age Adults</td>
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Children’s Mental Health Emergencies: 2019 vs. 2020

CDC November 2020, Morbidity and Mortality Weekly Report

*Proportion of mental health–related ED visits = number of ED visits for children’s mental health/total number of pediatric ED visits x 100,000.*
As COVID-19 Has Ramped Up – More Stressful for Black and Latinx Community Members

Early Distress from COVID 19

- Measured Serious Psychological Distress as Predictor of Serious Mental Illness and Longer-term Psychiatric Disorders.
- 1,468 US Adults, 18 years and older
- 2020 – 14% with Serious Psychological Distress vs 4% in 2018.
- Highest Levels of Distress = Hispanic, Females, 18 – 29 year old group, Household Income < $35,000 / year.
- Lowest Distress = 55 years old and older, Household Income > $75,000.

Lasting Distress from COVID-19

<table>
<thead>
<tr>
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<th>June 2019</th>
<th>June 2020</th>
</tr>
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<tbody>
<tr>
<td>Anxiety D/O</td>
<td>8.1%</td>
<td>25.5%</td>
</tr>
<tr>
<td>Depressive D/O</td>
<td>6.5%</td>
<td>24.3%</td>
</tr>
<tr>
<td>Suicidal Thought 10.7%</td>
<td>4.3%</td>
<td></td>
</tr>
</tbody>
</table>

Highest Levels of Distress = Young Adults, Latinx, Blacks and Essential Workers

Psychological Distress and Loneliness Reported by US Adults in 2018 and April 2020, E McGinty, Johns Hopkins Bloomberg School of Public Health, JAMA, June 3, 2020

Signs of Distress:

- 7 miles a day walking across UIHC.
- Highly Complex Patients in ICU.
- COVID Positive Psychiatric Patients in Isolation Units.
- Emergency Room 50% of time.
- 12 Code Green “Staff in Duress” Calls in 24 hour period.
- Crisis Stabilization Unit Full.
- Psychiatric Hospital Beds Full.
We have a Tradition of Leading and Caring for the Entire State

We are #3 in the Nation for Transfers to Our Hospital
What Can We Do?
Six First Steps
1. Acknowledge the Importance of This Time

As we pull out of the pandemic, we have the opportunity to make things better for all in our society?
Honesty and Importance of this Time

• Our society is experiencing unprecedented stress.
• COVID 19 is increasing the rates of mental illness and addiction across our society for years to come….and…
• Iowa is no exception on the dramatic impact of COVID 19 on the Black and Latinx members of our communities.
2. Keep Listening, Keep Learning

Getting Started at UI Health Care
UI Health Care Leadership Listening Sessions

• Students
• Staff
• Residents
• Faculty
New York Times Bestseller List; 9 of Top 10 Books about Race

1. White Fragility
2. The New Jim Crow
3. So You Want To Talk About Race
4. On Tyranny
5. Just Mercy
6. I’ll Be Gone In The Dark
7. The Warmth of Other Suns
8. Walking With The Wind
9. The Color of Law
10. Stamped From The Beginning
Beyond the Traditions of Medicine-
Reading List
America’s Quest for Health Class

1. The 1619 Project. Nikole Hannah-Jones
2. Marrow of Tragedy: The Health Crisis of the American Civil war. Margaret Humphreys
4. The New Jim Crow: Mass Incarceration in the Age of Colorblindness. Michelle Alexander
5. The Burden of Southern History. C. Vann Woodward
7. Notes from No Man’s Land. Eula Biss
8. The Worst Hard Tim: Timothy Egan
10. Why We Can’t Wait. Martin Luther King
12. The Shape of the River: Long-term Consequences of Considering Race in College of University Admissions. William Bowne and Derek Bok
13. Wrong Place, Wrong Time: Trauma and Violence in the Lives of Young Black Men. John Rich, MD, MPH
14. The Other Wes Moore: One Name, Two Fates. Wes Moore
15. Why Are all the Black Kids Sitting Together in the Cafeteria: And Other Conversations About race. Beverly Tatum
16. The Outsiders. S.E. Hinton
Beyond the Traditions of Medicine -
Reading List
America’s Quest for Health Class

17. The Killers of the Flower Moon: The Osage Murders and the Birth of the FBI. David Grann
20. Narco-nomics: How to Run a Drug Cartel. Tom Wainright
22. Dreamland: The True Tale of America’s Opiate Epidemic. Sam Quinones
25. Waiting for Superman: How We Can Save America’s Failing Public Schools. Karl Weber
26. The Power of Place: Geography, Destiny and Globalization’s Rough Landscape. Harm de Blij
27. Why Geography Matters: More Than Ever. Harm de Blij
31. The New Urban Crisis: How Our Cities Are Increasing Inequality, deepening Segregation and Failing the Middle Class — And What We Can Do About It. Richard Florida
33. Caste: The Origins of Our Discontent, Isabel Wilkerson
Beyond the Traditions of Medicine - Film / TV List

America’s Quest for Health Class

1. Wall Street
2. Norma Rae
3. it’s a Wonderful Life
4. Gods and Generals
5. Glory
6. Lincoln
7. Gangs of New York
8. Surviving the Dust Bowl
9. Ken Burn’s The Dust Bowl
10. The Grapes of Wrath
11. O’ Brother Where Art Thou
12. Bloods and Crips; Made in America
13. Ghost of Mississippi
14. Mississippi Burning
15. Straight Outta Compton
16. Narcos Series
17. Sicario
18. Traffic
20. Philadelphia
21. Dallas Buyers Club
22. Kamau Bell’s United Shades of America
3. Transform Our Curriculum

“At a Major University, An Initiative Must Become Embedded in the Curriculum to Have Staying Power”

Judith Rodin, President – University of Pennsylvania, Speaking of the Transformation of PENN and West Philadelphia
Opportunities within our Education Mission

**Student Care**
- UI Mobile Clinics (6 of them) – EMR, Interpreter, Vitals, Labs, Educator, History and Physicals, Marketing, Community Liaisons
- Iowa City Free Medical Clinic

**Research**
- College of Medicine
- College of Public Health
- Molecular Biology → Health Outcomes → National Policy

**Policy Advocacy**
- Student Government
- Carver College of Medicine and UIHC Committees
- American Medical Association – Iowa Medical Society Medical Student Section.

**Curriculum**
- Summer Courses and Programs
- Mechanisms of Health and Disease
- Medicine and Society
- Clinical and Professional Skills
- Clerkships
- Tracks
Developing New Skills Set:

- Data AND Listening
- Power of Stories
- Importance of Understanding History
- Seeing and Hearing Racism at the Individual and Structural Levels
- Willingness to Get Out Into the Community.
- Expect to Make Mistakes, Freeze, Fall Down.
- Learn From It and Get Up
- Learn Beyond the Traditions of Medicine
4. UI Health Care’s DEI Task Force

Getting Started at UI Health Care
UI Health Care DEI Planning

Climate and Environment

Recruitment and Retention

Health Disparities and Racism
5. Focus on Well-being

The Immediate Period Around the Traumatic Events Matters:

- **BAD**
  - Vietnam War Veterans - High Rates of PTSD related to a non-supportive return to the US. VA.gov, 2020

- **GOOD**
  - Israel – Immediate mental health interventions after terror events leads to lower rates of PTSD. Fortuna Ben-Harosh, MD, Orion Center, Haddasah Medical Center, Jerusalem, Israel (2017)
UI Health Care Tiers of Support to Our Community

1. Individual
24 Hour Hotline, COPES Team, Employee Assistance Program, Off-site Counseling, Office of Consultation and Research in Medical Education, Faculty Affairs, Hardin Library, Office of Cultural Affairs and Diversity Initiatives – Coaching, Personal Health Assessment, UI Recreation Ctrs Memberships, Health Coaches, Ergonomics, Executive Leadership Academy, UI Health Care Medical Director Leadership Coaching Program, Office of Continuing Medical Education

2. Micro-Systems
Clinical Transformation, EPIC Teams, Informatics Fellows Initiatives, Office of Cultural Affairs and Diversity Initiatives and Work Unit Trainings, Human Resources Office of Learning and Organizational Development, Patient Experience Coach, Provider Communication Program,

3. Culture
COVID – Job Protection and Hazard Pay, Infection Control and PPE Measures, Code Green, Patient Safety, Patient Advocate Reporting System, (PARS), Co-worker Observation Reporting System (CORS), Upstander Training, Out-List, Chief Wellness Officer (Department of Pediatrics), Vice Chair of Diversity (Department of Psychiatry), Income Sharing, Early Work on Curriculum and 2020 Summer Seminar Series, UI Health Care Task Force and Committees on Diversity, Equity and Inclusion
6. Nothing is Too Daunting to Take On and Improve......

We Can Solve the Most Complex Problems
Some Light at the End of a Very Long Tunnel

CV-19 Genetic Code in January 2020; First Vaccines May 2020

Patient # 001 - July 30, 2020

- Poverty rates worsened in North Tulsa.
- Raised $40,000,000 and 4 new clinics added.
- 37 new physicians added.
- Focused programs added.
- CV Dz, DM, infant mortality rates improved the most.
- 3 years of life expectancy added for 20,000 Tulsans.