

Medical Eracism: Abolishing Race-Based Medicine

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American Health Injustice

"Of all the forms of inequality, injustice in health is the most shocking and the most inhuman because it often results in physical death."

*Martin Luther King, Jr.,
Medical Committee for
Human Rights,
Chicago, March 25, 1966*



HEALTHCONSUMING
IN THE COVID-19 PANDEMIC



Definitions

- Health Disparity ≠ Health Inequity
 - Unavoidable health differences
 - Disparities [e.g. Pro Football players vs Pro Golfers]

Vs.

- Health differences that are avoidable, unnecessary and unjust
 - Inequities [e.g. chronic kidney disease, or maternal perinatal morbidity & mortality]



Objectives

- How race has been imbedded into clinical teachings and medical guidelines
- How race-based medicine allocates more resources away from racially and ethnically minoritized people
- How we plan to abolish race-based medicine here at NYC H+H!



What is Race Anyways?

- Social construct not based in meaningful scientific or biologic truth
- Political construct used to separate groups and justify differential treatment or outcomes

In 1866, Frederick Farrar lectured on the “Aptitude of Races” which he divided into 3 groups.⁷

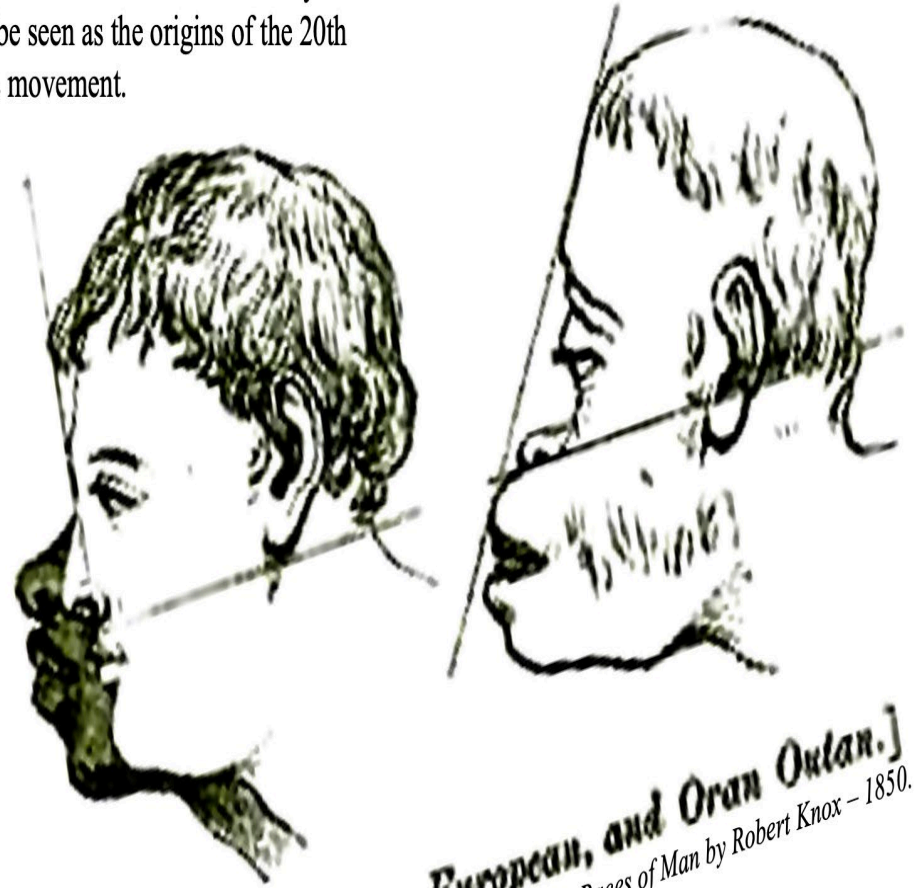
- **Savage** (*All Africans, indigenous people, people of color with the exception of the Chinese*)
- **Semi-Civilized** (*e.g. Chinese – who were once civilized but now their society was in arrested development*)
- **Civilized** (*European, Aryan and Semitic peoples*)

“England and France will rule Africa. Africans will dig the ditches and water the deserts. It will be hard work and the Africans will probably become extinct. “We must learn to look at the result with composure. It illustrates the beneficent law of nature, that the weak must be devoured by the strong.”⁴

The Races of Man: a Fragment. By
Robert Knox

All we know is that since the beginning of history, the dark races have been the slaves of those lighter skinned. What is that due to? 'I feel disposed to think that there must be a physical and consequentially, a psychological inferiority in the dark races generally.' This is perhaps not due to lack of size in the brain but rather a lack of quality in it.⁸

Knox's studies and others were taken very seriously, which can be seen as the origins of the 20th Century Eugenics movement.



[Profile of Negro, European, and Oran Outan.]
Illustration from *Races of Man* by Robert Knox - 1850.

Eugenics

A 19746

WHITE MAN WOMAN MULATTO WHITE MAN WHITE WOMAN

BOY BLACK GIRL HALF BLACK BOY HALF BLACK - PASS-FOR-WHITE WHITE BOY WHITE GIRL WHITE BOY WHITE GIRL

MARRIES

A B

WHITE BABY

*Interesting Researches
by the Carnegie
Institution Disprove
the Popular Notion
that a "Pass-for-White" Person Married to
a Pure White May Have a Negro Child*

By Dr. Woods Hutchinson
The World's Foremost Physician-Author.



Race, ethnicity and lung function: a brief history

Lundy Braun PhD

intellectual Thomas Jefferson featured lung differences between slaves and white colonists. Among the many physical distinctions that Jefferson described to justify the condition of slaves in the republic, one was “a difference of structure in the pulmonary apparatus” (3). Jefferson’s ideas about lungs would remain, however, in the realm of philosophical speculation without empirical foundation until the second half of the 19th century.

Knowledge of the spirometer spread quickly and Hutchinson’s innovations were adopted within a few years in Germany and North America, where researchers worked to further refine its technical details and uses. Perhaps the most significant experiments for the future of spirometry were those of plantation physician and slaveholder Samuel Cartwright in the US south. Drawing explicitly on Jefferson’s interpretive framework, Cartwright built his own spirometer to study difference in lung capacity in slaves and whites, and to quantify it precisely. According to Cartwright, “the deficiency in the negro” was “20 per cent”. Defining difference as ‘deficiency’, Cartwright established race as a key organizing principle of lung function measurements in the US (8).

Jefferson's philosophical musings were to capture an even more solid empirical foundation in the 1860s when racial research examining lung capacity shifted to the northern US. In 1864, the US Sanitary Commission asked Benjamin Apthorp Gould to head a massive anthropometric survey of black and white soldiers at the end of the Civil War. Over several years, field workers collected detailed data regarding bodily characteristics of soldiers, which Gould synthesized in his 1869 *Investigations in the Military and Anthropological Statistics of American Soldiers*. For unclear reasons, he chose to devote an entire chapter to describing lung capacity – measured using a spirometer– according to race. Without any adjustment for height or age, or attention to working and living conditions of newly emancipated slaves, Gould reported that “full blacks” had lower lung capacity than “whites”. The results were neither surprising to

Nearly 30 years later, Frederick Hoffman, chief statistician for Prudential Life Insurance Co. would turn to Gould's data to make broad claims about the lack of fitness of African Americans for freedom. According to Hoffman, “the smaller lung capacity of the colored race is in itself proof of an inferior physical organism” (3).

In 2005 the FDA Approves First Raced Based Drug for Heart Failure in Black Patients

Cardiologytoday

August 01, 2005 | 2 min read

SAVE 

Issue: [August 2005](#)

FDA approves BiDil for HF treatment in blacks

Agent is sole therapy for enhancing nitric oxide, a mechanism critical to slowing progression of HF in this population.

 [ADD TOPIC TO EMAIL ALERTS](#)

The Food and Drug Administration has approved BiDil, the first heart failure therapy specifically indicated for blacks.



Does Race Matter: Urinary Infections in Children?

Individual Risk Factors: Girls

White race
Age < 12 mo
Temperature $\geq 39^{\circ}\text{C}$
Fever ≥ 2 d
Absence of another source of infection

Probability of UTI	No. of Factors Present
$\leq 1\%$	No more than 1
$\leq 2\%$	No more than 2

Individual Risk Factors: Boys

Nonblack race
Temperature $\geq 39^{\circ}\text{C}$
Fever > 24 h
Absence of another source of infection

Probability of UTI	No. of Factors Present	
	Uncircumcised	Circumcised
$\leq 1\%$	a	No more than 2
$\leq 2\%$	None	No more than 3

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Viewpoint

January 13, 2020

The Case for Removing Race From the American Academy of Pediatrics Clinical Practice Guideline for Urinary Tract Infection in Infants and Young Children With Fever

Rachel H. Kowalsky, MD, MPH^{1,2}; Ashley C. Rondini, PhD, MA, MA³; Shari L. Platt, MD¹

» Author Affiliations

JAMA Pediatr. 2020;174(3):229-230. doi:10.1001/jamapediatrics.2019.5242

Questioned in the Scientific Literature

The NEW ENGLAND JOURNAL of MEDICINE

MEDICINE AND SOCIETY

Debra Malina, Ph.D., *Editor*

Hidden in Plain Sight — Reconsidering the Use of Race Correction in Clinical Algorithms

Darshali A. Vyas, M.D., Leo G. Eisenstein, M.D., and David S. Jones, M.D., Ph.D.



Current Race-Based Medicine

- Kidney function
- Birth counseling
- Lung function
- Peds UTI risk
- Heart failure
- Cardiac surgery
- Kidney donation
- Kidney stones
- Breast cancer
- Bone density



Race Based Medicine

Race is a social construct that is used to group people based on physical characteristics, behavioral patterns, and geographic location. Racial categories are broad, poorly defined, vary by country and change over time. People who are assigned to the same racial category do not necessarily share the same genetic ancestry; therefore, there are no underlying genetic or biological factors that unite people within the same racial category. By using race as a biological marker for disease states or as a variable in medical diagnosis and treatment, the true health status of a patient may not be accurately assessed, which can lead to racial health disparities.

The American Academy of Family Physicians (AAFP) opposes the use of race as a proxy for biology or genetics in clinical evaluation and management and in research. The AAFP encourages clinicians and researchers to investigate alternative indicators to race to stratify medical risk factors for disease states. (July 2020 BOD) (2020 COD)



PRESS RELEASES

New AMA policy recognizes racism as a public health threat



NOV 16, 2020

Live Your Healthiest Life. NYC HEALTH+ HOSPITALS

Friday, December 11, 2020

Attacking Racism at NYC Health + Hospitals as a Public Health Threat

This past month, the American Medical Association (AMA) declared racism "an urgent public health treat." NYC Health + Hospitals wholeheartedly agrees, and we are glad to see the AMA take this important and necessary step forward in declaring racism a key driver of health inequity.

Thursday, February 11, 2021

Abolishing Race Based Medicine for Kidney Function, VBAC and More

NYC Health + Hospitals Office of Quality & Safety, in partnership with the Equity & Access Council, has embarked on an effort to abolish race based medicine from our medical practices across our health system.


NYC Health + Hospitals is proud to be leading the nation in removing race based practices in the delivery of care. We stand resolute in treating our patients as individuals and targeting our treatments and guidance based on their specific biology and unique social and life experiences, not simply their race or ethnicity.



CONTEXT

- When calculating a patient's kidney function (GFR), we often use a set of calculations based on various factors to estimate their glomerular filtration rate or eGFR
- Traditionally, these risk factors include serum creatinine, age, sex and **race (Black vs. non-Black)**
- The equation reports out two values. For Black patients it increases the estimated GFR by 16-21% to account for their "increased muscle mass", though no robust scientific evidence exists to support this claim
- **The unintended consequence is to assert and propagate a biological cause for Black bodies being different from all non-Black bodies, a popular eugenicist view**

CONTRIBUTING FACTORS


- 
- ❑ African Americans have a **3x** and Hispanics **1.5x higher risk** of developing kidney failure than White Americans¹
 - ❑ By having higher eGFRs, Black patients might have delayed referral to specialty services, dialysis and transplantation



KEY TAKEAWAYS

- ❑ The inclusion of race is fraught with bias and has lasting deleterious implications for our Black patients. **For a multitude of social and scientific reasons, the Nephrology workgroup feels strongly that the inclusion of subjective race (a social construct) as an objective (biologic) proxy for creatinine generation / clearance in the biomedical environment does not meet the scientific rigor required at NYC Health + Hospitals for our diagnostic screening tools.**

PLANS FOR CORRECTIVE ACTION

- 
- ❑ Lab Services - Standardize all eGFR calculations to use CKD-EPI eGFR(Cr) where results will be reported without race adjustment based on serum creatinine, age, sex, and is normalized to 1.73m² body surface area
 - ❑ Epic – Work to ensure raced based eGFR is no longer reported out as 2 different values to our clinicians and patients
 - ❑ **Approved by Nephrology Workgroup, IM Council, ICU & OB/GYN leadership, Quality & Safety, Medical & Professional Affairs, Equity & Access Council, Clinical Lab Council, CMO Council**

1. <https://www.kidney.org/news/establishing-task-force-to-reassess-inclusion-race-diagnosing-kidney-diseases>



MEDICAL ERACISM: STOP RACE-BASED VBAC COUNSELING

CONTEXT:



- + Clinicians may use a risk tool – known as **Vaginal Birth After Cesarean-section (VBAC)** calculators – to estimate the risk and likely success of a trial of labor for a vaginal delivery after an earlier C-section in a prior pregnancy.
- + Formulated in 2007, the VBAC calculation includes risk factors, such as age, BMI, and clinical history of delivery. These algorithms also consider whether the patient is of **Black race** or **Hispanic ethnicity**. For **Black women** it decreases the estimated success rate of vaginal deliveries by **67%** and for **Hispanic women** by **68%**.
- + The functional consequence is to insinuate a biological cause for Black & Hispanic women’s bodies being fundamentally different from a “normal” body. This reinforces the false idea that race itself is a biologically significant risk factor for illness and minimizes the real effects of racism and health inequity on minoritized people.

CONTRIBUTING FACTORS:



- Black women remain **3x – 4x** more likely to die from pregnancy-related causes than White women in America.¹
- While both the clinician and patient decide together whether a TOLAC or elective CS should be performed, the decision to pursue either may be influenced by medical bias.



KEY TAKEAWAYS:

- **The Women’s Health Council feels strongly that the inclusion of race as an objective proxy for a patient’s VBAC complication risk calculation does not meet the scientific rigor required at NYC Health + Hospitals for our diagnostic screening tools.**
- **The Women’s Health Council applauds NYC Health + Hospitals clinicians for forgoing the use of the race-based VBAC calculators in their VBAC counseling.** Additionally, the American College of Obstetricians & Gynecologists also stresses that individual complications must be assessed on a case-by-case basis.

PLANS FOR FURTHER ACTION:

- We must continue to eliminate health inequities from within Women’s Health in the United States. A key first step is identifying how implicit biases affect the way we view, interact with and counsel our patients. De-implementation of race-based clinical calculators in favor of more equitable approaches that address both women’s social determinants of health (e.g. insurance type, zip code, low income, racism) and their biological clinical measures (e.g. prior labor course, age, BMI).
- This is evidenced in NYC H+H’s Cesarean-section rates below the NY state average (19%, vs. 22.9%) and successful VBAC rates greater than the NY state average (19%, vs. 13.3%). NYC Health + Hospitals remains committed to using the most empirically-relevant information to inform our diagnostic screening tools.



1. <https://doi.org/10.1016/j.whi.2019.04.007>

CONTEXT



- + When evaluating a patient's Pulmonary function test (PFT), we often use a set of calculations based on various factors to estimate their predicted normal level of lung function. Traditionally, these risk factors include age, sex, height and **race/ethnicity**.
- + The equation reports an estimated normative value for lung function that is compared to the measured lung function given set risk factors. For Black patients, it decreases the estimated PFT by 10-15% to account for their "difference in structure", though no scientific evidence exists to support this claim¹.
- + The functional consequence is to insinuate a biological cause for Black/Hispanic bodies being different from a "normal" body, which reinforces the false idea that race itself is a biologically significant risk factor for illness and minimizes the real effects of racism and health inequity such as **environmental exposures** on segregated minoritized people².

CONTRIBUTING FACTORS

- + Black patients are **3x** more likely to die and Black children **4x** as likely to be admitted to the hospital for asthma than White Americans.
- + **79%** of all municipal waste incinerators in the USA are within 3 miles of communities of color and low-income³.
- + There is a **54%** higher environmental emissions burden among Black patients.



KEY TAKEAWAYS

- + By having lower normalized PFTs, Black patients may have delayed referral to specialty services, escalation of treatment and education on prevention.
- + **For a multitude of social and scientific reasons, the Pulmonary Experts feel strongly that the inclusion of subjective race (a social construct) as an objective (biologic) proxy for pulmonary function in the biomedical environment does not meet the scientific rigor required at NYC Health + Hospitals for our diagnostic screening tools.**



PLANS FOR CORRECTIVE ACTION



- + Clinical Services - promote the use of PFTs without race adjustment based on age, sex, and height. Will adjust PFT machine algorithms and educate providers of de-implementation of race-based reference ranges.
- + **Will submit to Pulmonology Leaders, Medicine Council, Critical Care Council, Ambulatory Care Council, Peds Council, Quality & Safety, Medical & Professional Affairs, Equity & Access Council, CMO Council.**

1. Braun L. Race, ethnicity and lung function: A brief history. Canadian Journal of Respiratory Therapy : CJRT Revue Canadienne de la Therapie Respiratoire : RCTR. 2015 ;51(4):99-101

2. Sarkar et al., Environmental correlates of chronic obstructive pulmonary disease: a cross-sectional, observational study. Lancet Planetary Health, 3 (11) (2019), pp. e478-e490

3. Incinerators in Decline, Tishman Environment and Design Center. 05/2019

Take Home Points

- Race is a social construct without meaningful biological or scientific distinction
- Racism is the risk factor for racial health inequities, not race
- Race-based medicine contributes to health inequities

2021 Crisis - Black Men in White Coats

- ~2% of physicians in the USA are Black men
- Less Black men graduated from medical school in 2014, than in 1978
- Black men have the lowest life expectancy of any demographic group in America

Please Join Us!

Save your spot for
**Black Men in
White Coats**

*A documentary about the need for
more Black physicians in America*

February 18 - 21



What is it?

Black Men in White Coats examines the lack of Black physicians in the United States and dissects the systemic barriers preventing Black men from becoming medical doctors, and the consequences for society at large. The documentary will do three things for viewers:

1. Demolish the false stereotypes of Black men in America and show the world that we have plenty to offer society.
2. Explore the reasons why there are so few Black male doctors and the implications of this tragedy.
3. Provide inspiration and hope for diverse youth and their families.

Moderator:



Louis Hart, MD
Director of Equity,
Quality & Safety, NYC
Health + Hospitals

Panelists:



Donnie Bell, MD
Deputy Chief Medical
Director, NYC Health +
Hospitals



David John, MD, DABFM
Chief Medical Officer
NYC Health + Hospitals/
Gotham Health



Joseph E. Ravenell, MD, MS
NYC Health + Hospitals/Bellevue
Associate Dean for Diversity
and Inclusion, NYU Grossman
School of Medicine

Some more background

Did you know that fewer Black men applied to medical school in 2014 than in 1978? What challenges do our Black boys face? Who are their role models? Why is it easier to visualize a Black man in an orange jumpsuit than in a white coat? What's happening in society that more Black women are becoming doctors while Black men are stagnant?

To learn more, visit www.blackmeninwhitecoats.org

Documentary screening and panel discussion facilitated
by NYC Health + Hospitals Equity & Access Council.

**Watch the documentary and participate
in the panel discussion**

How it works: Sign up for documentary screening and the online panel discussion featuring Black physicians from NYC Health + Hospitals. You will receive a follow-up email with details.

Screening days: February 18, 19, 20, 21

Panel discussion: February 25, (6:00 PM-7:30 PM)



Watch the trailer:

[trailer.bmwcmovie.com/
trailer160255793178](http://trailer.bmwcmovie.com/trailer160255793178)

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A decorative border at the bottom of the slide consisting of a row of small, colorful squares in various colors like green, orange, blue, and pink, some with white crosses on them.

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