RACIAL DISPARITIES IN KIDNEY TRANSPLANTS

CONTEMPORARY FACTS

- The prevalence of End Stage Renal Disease (ESRD) for African American people is almost 3.5 times as high as it is for white Americans. The rate of ESRD for African American people is 5,855 cases per million, but only 1,704 per million for whites. (23)
- 14.5% of whites vs. 10.1% of African American people are placed on the waitlist for a deceased donor kidney within 1 year of reaching End Stage Renal Disease (ESRD). (23)
- Wealthy Black people are 57% less likely to be waitlisted for a deceased donor kidney than the poorest whites.
- Although whites have a slightly higher rate of stages 1-3 Chronic Kidney Disease than Black people, Black people go on to reach ESRD at four times the rate of whites. (4)
- When rating the stage of chronic kidney disease for a patient, doctors use an equation for calculating the estimated Glomerular Filtration Rate (eGFR) that includes a race coefficient. When using this formula to determine kidney function, Black people appear to have 16% more kidney function than they actually do when evaluated directly through a more accurate but expensive and time consuming process involving blood and urine collection over a 24 hour period. (4)

CKD VS. ESRD BY RACE

b



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RACE EQUATION (CKD-EPI)

 $eGFR = 141 \times min(S_{cr}/\kappa, 1)^{\alpha} \times max(S_{cr}/\kappa, 1)^{-1.209} \times 0.993^{Age} \times 1.018$ [if female] × 1.159 [if African American]

where:

(4)

b

S_{cr} is serum creatinine in mg/dL,

 κ is 0.7 for females and 0.9 for males,

 α is -0.329 for females and -0.411 for males,

min indicates the minimum of S_{cr}/κ or 1, and

<mark>max indic</mark>ates the maximum of S_{cr}/κ or 1

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PRIMARY Sources



JAMES MARION SIMS



(3)

The patient is not cured so long as there is the involuntary loss of a single drop of urine. It would be tiresome for me to repeat in detail all the stages of improvement in the operation that were necessary before it was made perfect. These I have detailed in a surgical history of the facts, and to professional readers are still well known. Besides these three cases, I got three or four more to experiment on, and there was never a time that I could not, at any day, have had a subject for operation. But my operations all failed, so far as a positive cure was concerned. This went on, not for one year, but for two and three, and even four years. I kept all these negroes at my own expense all the time. As a matter of course this was an enormous tax for a young doctor in country practice. When I began the experiments, the other doc-

(20)

EPHRAIM MCDOWELL

"The negroes of the village and the surrounding country being naturally ignorant and superstitious, whenever they spied Dr. McDowell walking in the distance, would rush into the nearest building, fearing that he might waylay and maltreat them. They feared him as they would some beast of prey."



FIGURE 1.2. Portrait of Ephraim McDowell. From National Library of Medicine, http://ihm.nlm.nih.gov/images/B29869.

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(8)

CLAIM

Enslaved Black women were physically and emotionally abused during surgical experimentation performed by white doctors in the 18th century, which led to a long standing distrust and avoidance of the medical establishment and a resulting exclusion from medically sound care continuing to this day.

REASONS BLACK WOMEN MORE LIKELY TO NEED AN ORGAN TRANSPLANT

- Black women are more likely to distrust the mainstream medical system and therefore less likely to go in for regular wellness check ups and are more likely to delay care for symptomatic illness.
- Discrimination by doctors who don't take their symptoms seriously when they are still at a stage of illness where treatment might prevent organ failure
- Black people are four times more likely to need a kidney transplant than white people because of higher rates of diabetes. Reduced access to fresh food, safe places to exercise, and other socioeconomic disparities increase diabetes rates in Black people.



REASONS BLACK WOMEN MORE LIKELY TO NEED AN ORGAN TRANSPLANT (CONT)

- Housing discrimination increases the chances that they live in areas with air and water pollution, which increases the risk of organ failure.
- Stress of living life as a Black woman in current society increases the risk of chronic organ disease.



REASONS BLACK WOMEN ARE LESS LIKELY TO GET A TRANSPLANT WHEN NEEDED

- Discrimination when being evaluated to see if they are a suitable candidate.
 - Financial
 - Medical preparation for transplant is expensive as all other body systems need to be evaluated to make sure person is healthy enough for surgery.
 - Medicare insurance coverage ends 3 years after transplant, so a patient needs private insurance to cover the expense of immune suppressing medication to keep transplant
 - Social/emotional- subjective evaluation of whether transplant candidate will be able to take care of a transplanted organ. Can be identified as not a good candidate if they lack family support, or they are 'non-compliant' with treatment, for missing appointments or refusing to get vaccines.

REASONS BLACK WOMEN ARE LESS LIKELY TO GET A TRANSPLANT WHEN NEEDED (CONT.)

• Medical- might be too sick for transplant because of delay in getting care

- Fewer Black donors means it is harder to find a match. Although organs can go to people of different ethnic and racial backgrounds, it is generally easier to find a suitable match for donation if the recipient is the same race as the donor.
- General distrust of the medical system might make Black women avoid surgery and other complex medical procedures.



REASONS WHY THERE ARE FEWER BLACK ORGAN DONORS

- Asking the family of a brain dead person is an inherently sensitive conversation. When the family involved is Black, the situation is even more complex given the past history of medical experimentation on enslaved people. Family members are more likely to react with with suspicion to such a request as they may believe the doctor is trying to kill their family member
- Religious reasons, belief that the body should remain intact after death



REASONS WHY THERE ARE FEWER BLACK ORGAN DONORS (CONT.)

• Resistance to accepting the idea that part of their body will now belong to someone else (commodification of body/body parts reminiscent of slavery)

- There are fewer living donors because of distrust of the medical system. They are less likely to be treated for post-op pain or any potential complications.
- Black people more likely to have medical conditions that make them ineligible to donate
- Black people are less likely to know anyone who has donated an organ, which in turn makes them less likely to be donors.





WORKS CITED

https://docs.google.com/document/d/1e2e1pAA5RvyoiVmR07Mb935inO35YVdUxWD34gqhp6g/edit?usp=sharing

