Research spotlight

Examining the use of race in clinical decision-making: hypertension prescription management guidelines example

Background

- Medical education emphasizes evidence-based guidelines and algorithms for diagnosis, prognosis, and treatment, which are considered authoritative. Some of this "evidence-based" medicine is rooted in historical biases, such as the slavery hypertension hypothesis, which assumes inherent biological differences between racial groups.
- These biases can be embedded in clinical guidelines, leading to inequitable outcomes. For example, the JNC 8 Evidence-Based Guideline for the Management of High Blood Pressure in Adults, published in 2014 and influenced by the Antihypertensive and Lipid-Lowering Treatment to Prevent Heart Attack Trial (ALLHAT) study, recommends different initial treatments for Black versus non-Black patients based on data interpreted through a racial worldview (RWV), which assumes biological differences between races, leading to overstated conclusions about drug efficacy.
- Providers may be hesitant to question authoritative guidelines or deviate from established protocols due to concerns about patient safety and professional liability. However, unlearning these biases is necessary to ensure equity in care delivery for all patients, because simply applying guidelines or algorithms without critical analysis of the use of race can perpetuate harm.

Findings

- Providers must recognize that race is a social construct, not an effective proxy for genetic or biological differences, and should critically analyze the evidence behind any race-based recommendations that influence medical decision-making.
- This includes acknowledging the historical context of medical guidelines and tools. For example:
    - The JNC 8 guidelines, which recommend different initial treatments for Black versus non-Black patients, were informed by the ALLHAT study, which had several flaws.
    - These flaws include:
        - Poorly defined racial categories.

- A shift from primary outcomes (showing no significant differences) to secondary outcomes to produce racialized conclusions.
- An artificial study design that disadvantaged the ACE inhibitor group, overstated differences between racial groups, and selective uptake of evidence.

- Such issues reveal how an RWV can shape research design and interpretation, leading to self-fulfilling prophecies of racial differences influencing healthcare decision-making.

Lessons learned

- ✔ Providers who critically evaluate clinical guidelines and algorithms can avoid perpetuating health disparities for minoritized patients based on harmful racial assumptions. Improved patient care is possible when providers focus on environmental factors, including social determinants of health, rather than race as a predictor of treatment response.
- ✔ To move forward, providers can:
  - Embrace **biocritical inquiry**, which considers both genetic and environmental factors as well as the social context in health outcomes.
  - Pursue **structural competency,** to explore the impact of social and economic forces on health.
  - Practice **race-conscious medicine**, to recognize the impact of racism on patient health outcomes.
- ✔ This approach leads to more ethical, equitable, and effective clinical practice that promotes health for all patients.

Citations

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