Cardiovascular Risk and Race Concordance: Are They Relevant?

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INTRODUCTION
Race plays a significant role in our interactions with other people. The effects of physician-patient interactions on satisfaction, adherence to medical advice and health outcomes are well documented. For many, having a provider of the same race/ethnicity is also valuable. Can the race of doctors compared to their patients have an effect on CV risk?

LITERATURE REVIEW
There is discrepancy in the literature about the effects of race concordance and patient outcomes. Four studies will be summarized.

In one study, those respondents in each race/ethnic group who had a choice in the selection of their physician were more likely to be race concordant, and those who were race concordant reported greater satisfaction with their physician compared with those who were not. Another study supporting race concordance noted that patients who were of the same racial or ethnic group as their providers were more likely to use needed health services.

When looking specifically at CV disease, it was noted that patient-physician race/ethnicity and language concordance had a positive correlation with medication adherence for African American and Spanish-speaking patients, but not for Asian or English-proficient Hispanic patients. It was also found that communication rated as more collaborative in race-discordant relationships was associated with better adherence and there was no significant association between adherence and communication in race concordant relationships.

A meta-analysis of 27 studies with data on 56,276 patients and 1,756 providers showed no clear pattern regarding healthcare utilization, patient-provider communication, preference, satisfaction, or perception of respect in relation to race concordance.

METHODS
- Medical chart audit
- Data Source: EPIC and NextGen
- Patients of WellStar Family Medicine Clinic in Morrow, GA
  - Two or more preventative visits
- Time: 2013-2017
- Sample Size: 965 encounters; 372 patients
- Data
  - patient's race, age, sex
  - Concordant variables: physician by race
  - Index score composed of: BP, antihypertensives, DM, lipid panel, smoking status
  - Calculated using Framingham Model
- Statistics: t-test, ANOVA, power

RESULTS SUMMARY
- CV risk at our clinic
  - White > Black > Asian
  - Asians have a lower CV risk than all other races in our clinic regardless of their sex and race concordance with their physician
  - Women have a lower CV risk than men in our clinic
- There is no statistically significant difference in CV risk based on race concordance

CONCLUSION
The goal in completing this research is to add valuable information to the evidence that currently exists. Although this study showed no significant difference in CV risk in relation to race concordance, it is possible this is due to other positive patient-provider effects. As part of our integrated health care, providers are attuned to behavior change, emotional support for life challenges, and understanding environmental risks that patients may experience.

LIMITATIONS
There are some limitations in this study. First, it was completed as a 3rd year residency research project and the short time frame resulted in limited data and a sample size too small to power the study. Second, there was no indication of preceptor race for residents, so possible there was race concordance with the preceptor even if there was not for the resident. Lastly, there was no comparison of residents’ patients to attendings’ patients, which might have shown that preference was based on perceived experience as opposed to race.

REFERENCES
4. Salimah H. Meghani, Jacqueline M. Brooks, Trina Gipson-Jones, Roberta Waite, Lisa Whitfield-Harris & Janet A. Deatrick ... does it matter in improving minority patients’ health outcomes?, Ethnicity & Health, 14:1, 107-130, DOI: 10.1080/13557850802227031