

Increasing incidence of diabetes related ESKD in young African- Americans

Areef Ishani, MD

David Gilbertson, PhD

Eric Frazier, BS

Allan Collins, MD

United States Renal Data System

USRDS

Background

- **The prevalence of diabetes in the general population has steadily increased over the past decade, particularly among African-Americans.**
- **Generally, African-Americans have had poorer diabetes care compared to white.**

Research Question

- We aimed to describe the temporal trends in the incidence of ESKD with diabetes as the primary cause in the United States, by age and race

Methods

- **The United States Renal Data System is notified of all end stage kidney disease (ESKD) events in the United States by the Centers for Medicare and Medicaid form 2728.**
- **Diabetes as the primary cause of ESKD was defined based on the 2728 primary cause of kidney disease field.**

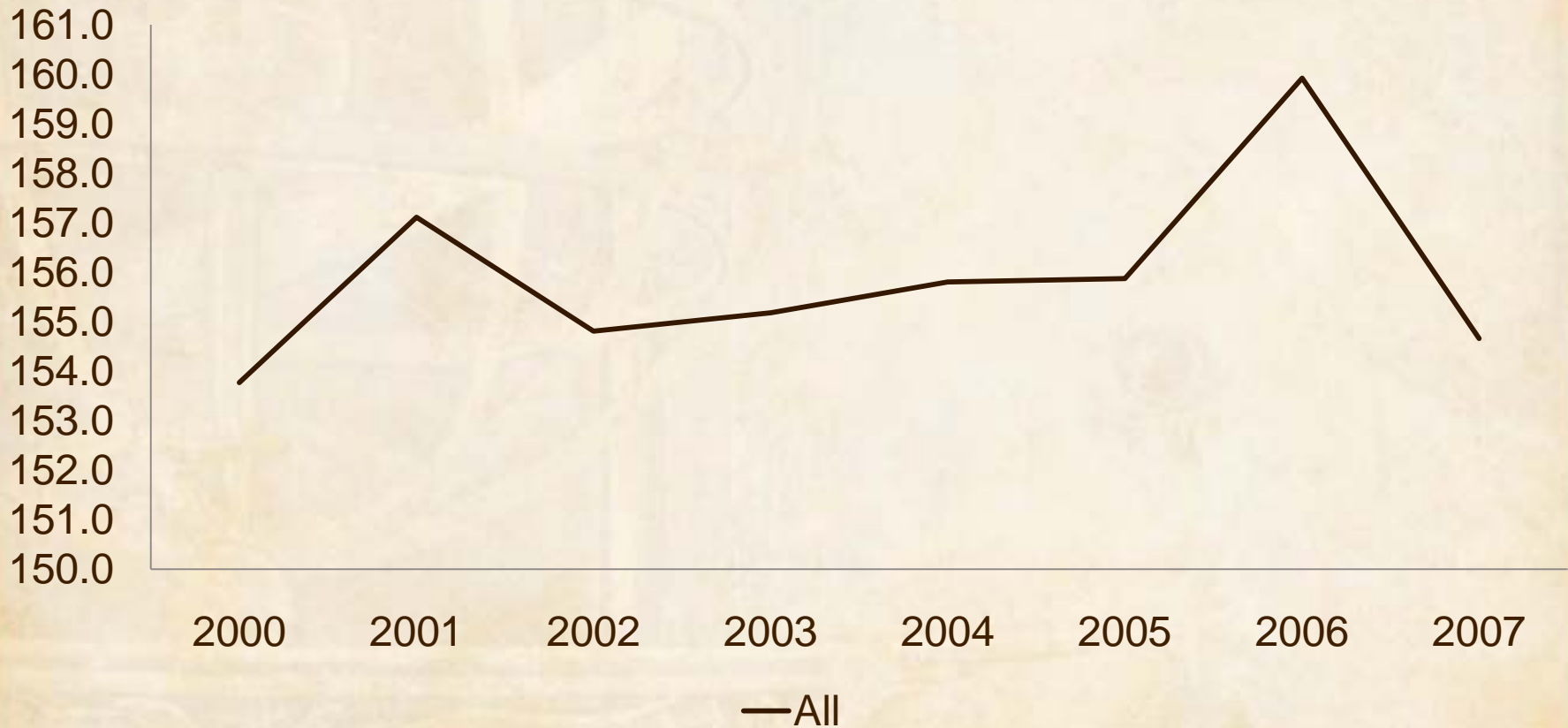
Methods

Primary Predictor

- Rates were determined both in unadjusted analysis and adjusted for the age, gender and race adjusted census population from 2000.
- Rates for each reported year are based on a 3 year rolling average, and are reported per 1,000,000.

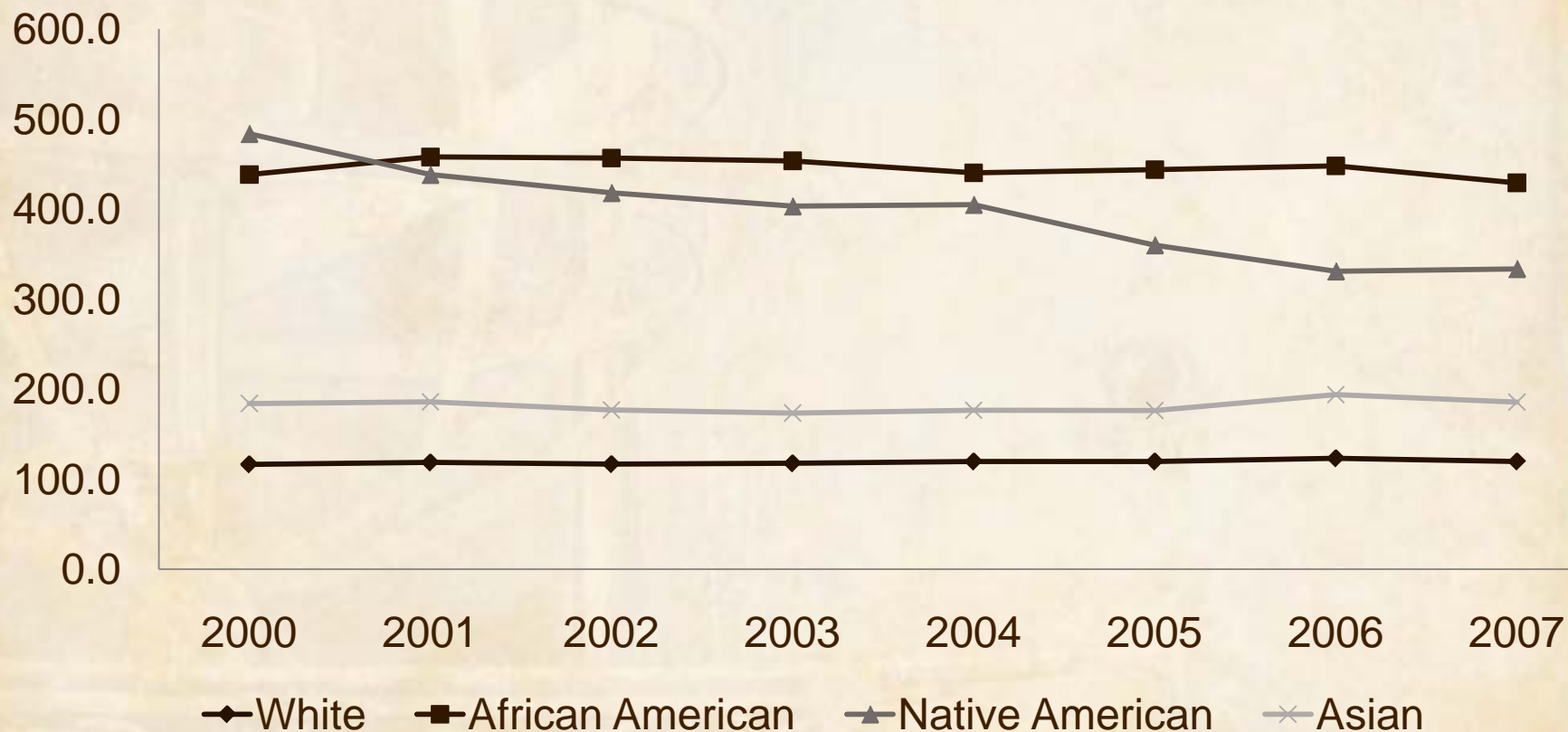
Incidence of ESKD (diabetes as primary cause) by year

Rate per million, adjusted for age, gender, race



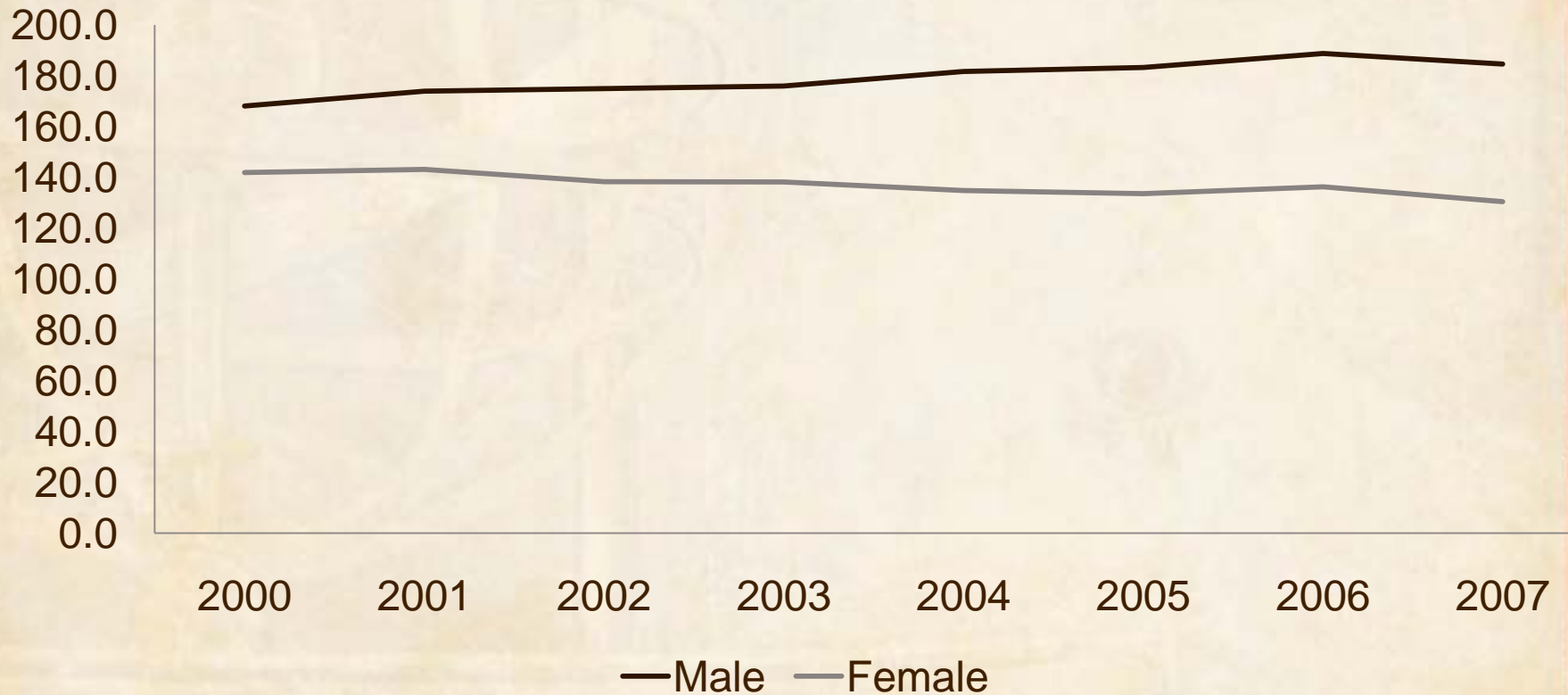
Incidence of ESKD (diabetes as primary cause) by year

Rate per million, adjusted for age, gender



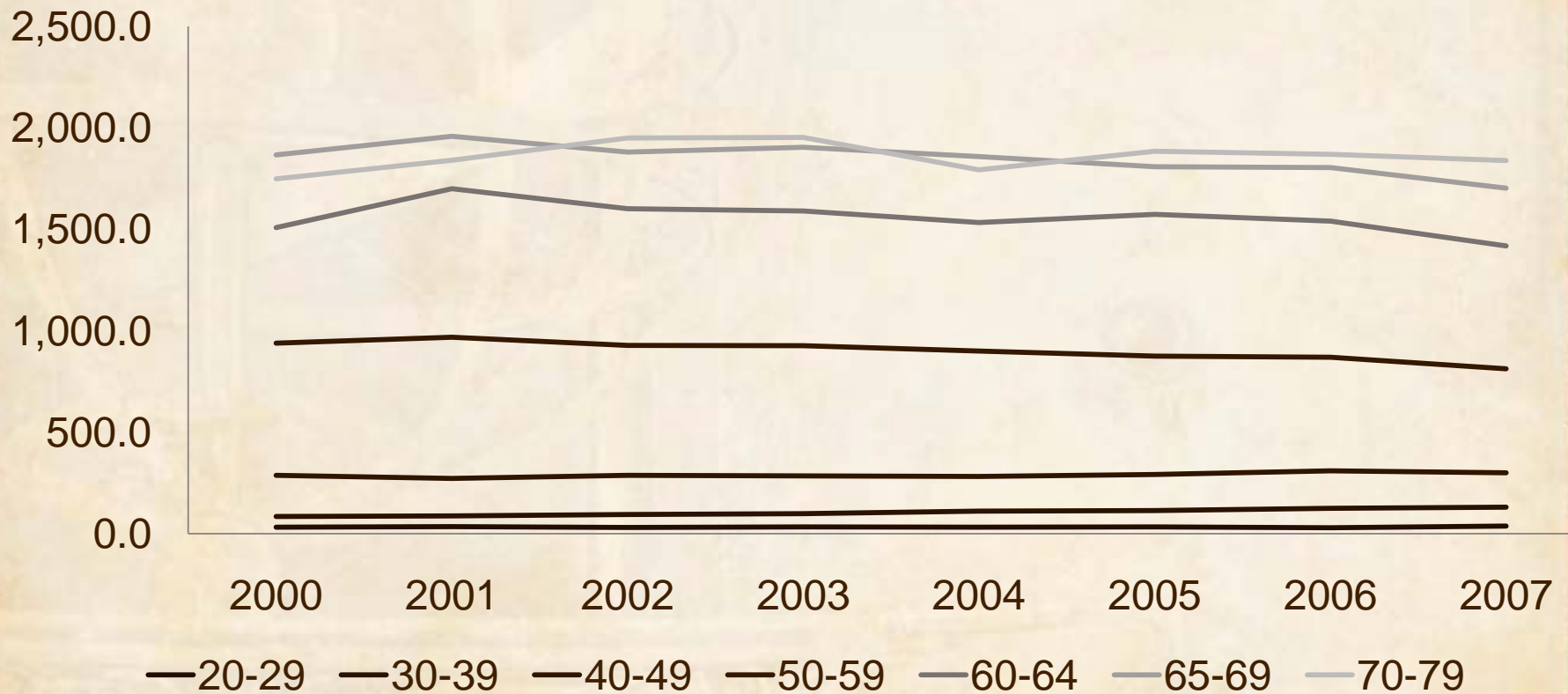
Incidence of ESKD (diabetes as primary cause) by year

Rate per million, adjusted for age, gender, race



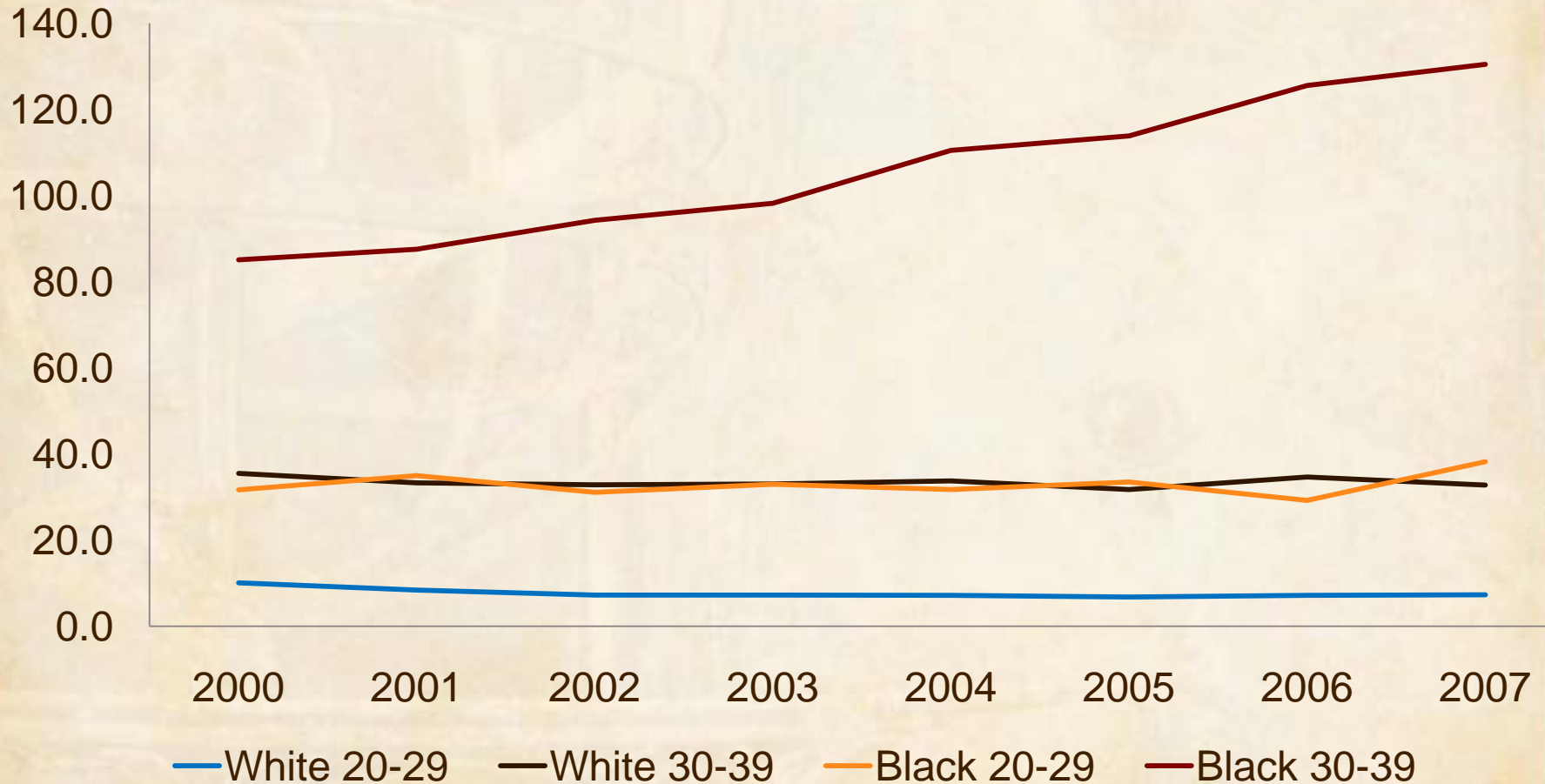
Incidence of ESKD (diabetes as primary cause) by year – African Americans only

Rate per million, adjusted for gender



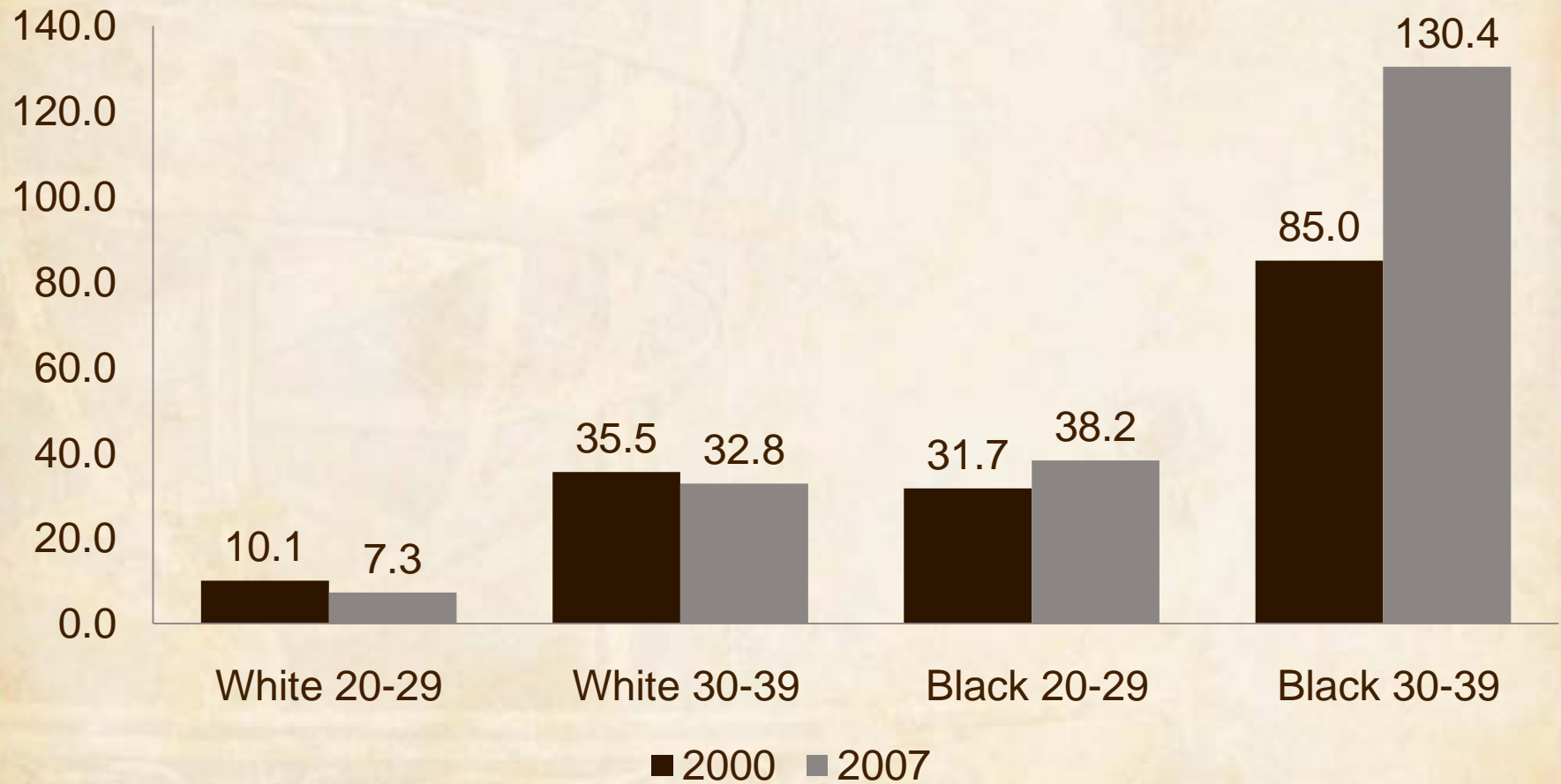
Incidence of ESKD (diabetes as primary cause) by year

Rate per million, adjusted for gender



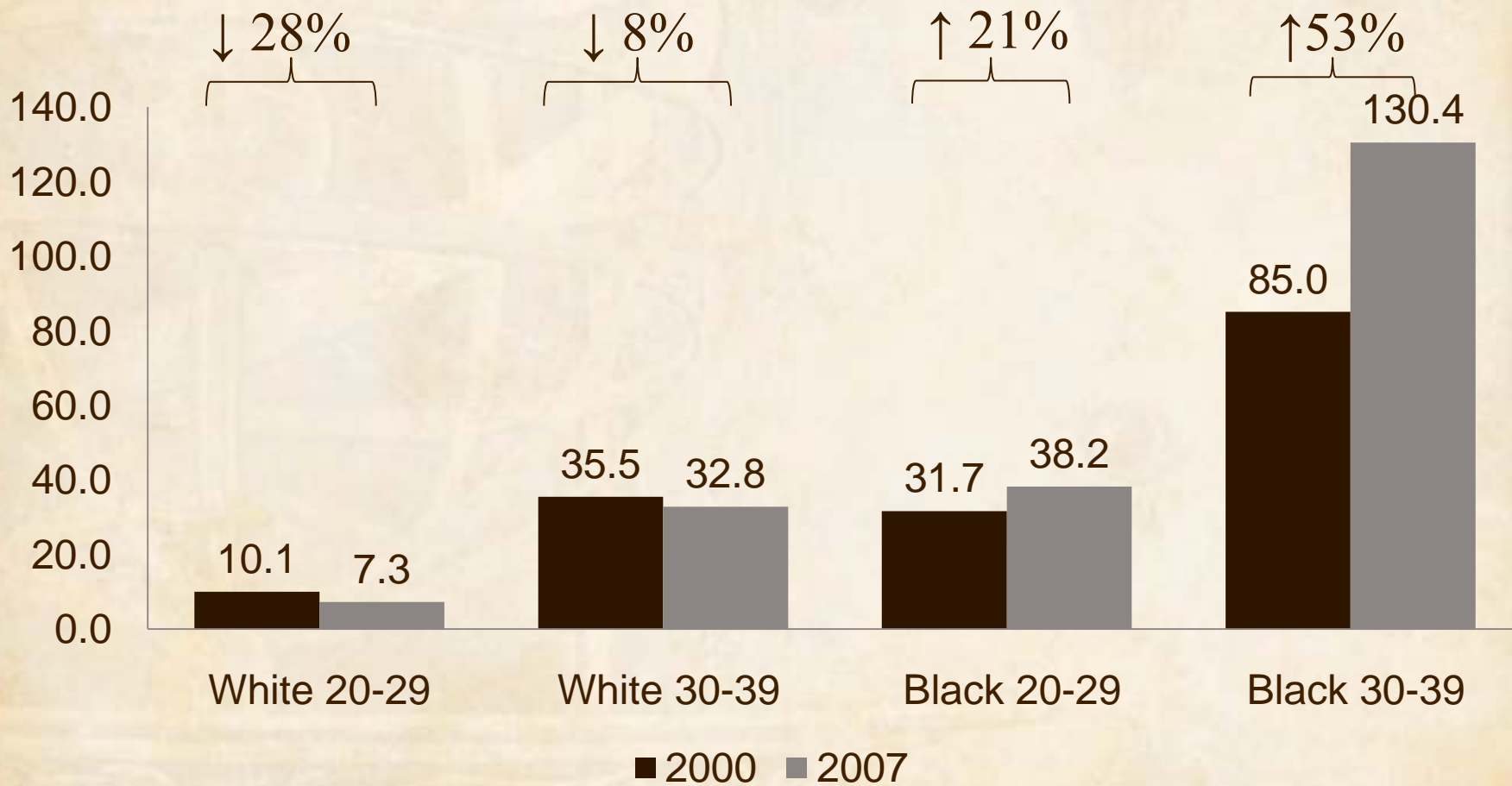
Incidence of ESKD (diabetes primary)

Rate per million, adjusted for gender



Incidence of ESKD (diabetes primary)

Rate per million, adjusted for gender



Conclusion

- **Rates of ESKD secondary to diabetes have increased dramatically in younger African-Americans.**
- **This increase is disproportionate to the relatively stable incidence of ESKD overall, and among those with diabetes.**

Conclusion

- **It is unclear if the increasing rate of diabetes associated ESKD in African-Americans is the results of the increased incidence of diabetes in this population or the result of poorer diabetes care.**
- **Future studies should target this high risk group for the prevention of ESKD.**