THE FACE OF DISPARITIES IN HEART FAILURE

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DISCLOSURES

NONE

HEALTHCARE DISPARITIES IN CARDIOVASCULAR DISEASE

CARDIOVASCULAR DISEASE IN AFRICAN AMERICAN WOMEN: THE HEART OF THE MATTER

HISTORY, BACKGROUND AND IMPACT OF HEALTHCARE DISPARITIES

HISTORICAL PERSPECTIVE

- MYTHS
- MISUNDERSTANDINGS
- MISMANAGEMENT

MR. HOFFMANN AND THE "SLAVE HEALTH DEFICIT"

Dr. Martin Luther King, Jr. On Health Care Disparities

"Of all the forms of inequality, injustice in health is the most shocking and inhumane."

Dr. Martin Luther King, Jr.

Talmud Statement

By ten things is the world created,

By wisdom and by understanding,

And by reason and by strength,

By rebuke and by might,

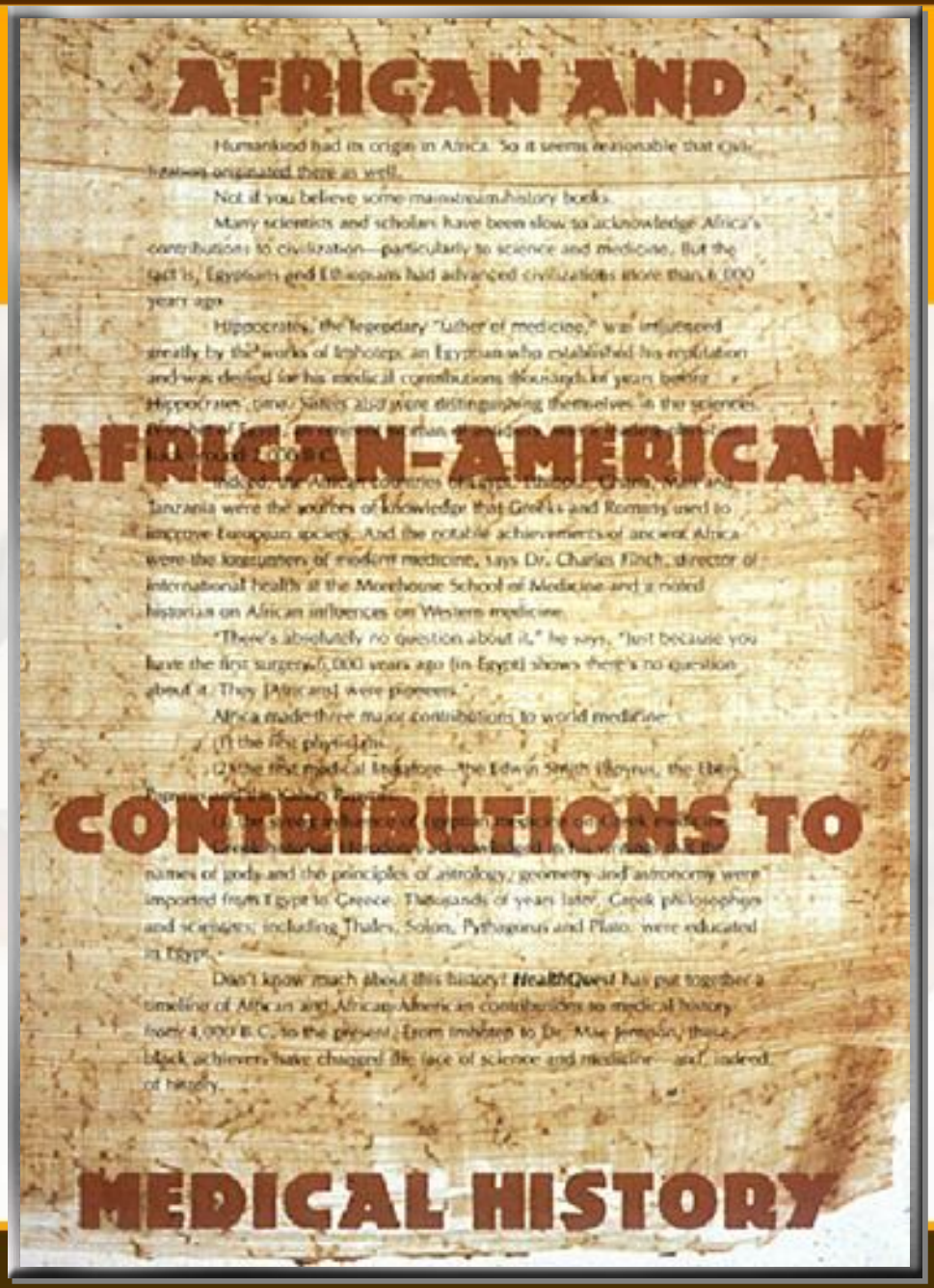
By righteousness and by judgment,

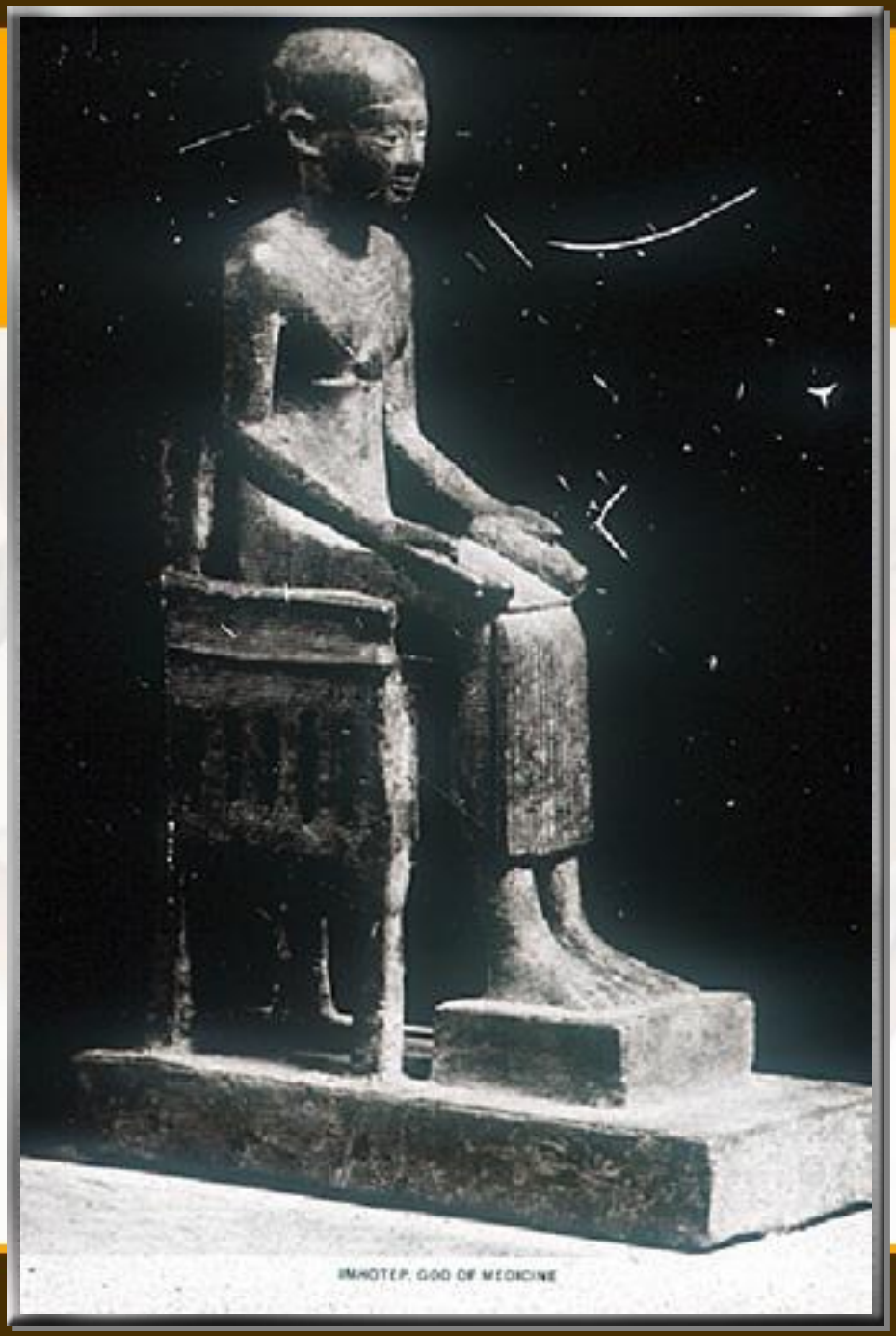
By loving kindness and by compassion.

– Talmud Higaga 12A

Race And Ethnicity Definitions:

- **Healthcare disparity**: A differential in outcomes of prevention and treatment of illness and disease which can be shown to vary according to the race, gender, and/or ethnic identity of patients. These differences may be ascribed to racism, denial of equal access to care, possession of different health-seeking behavior and idiosyncratic responses to treatment, or to poorly understood biological and genetic mechanisms.


AFRICAN AND
AFRICAN-AMERICAN
CONTRIBUTIONS TO
MEDICAL HISTORY

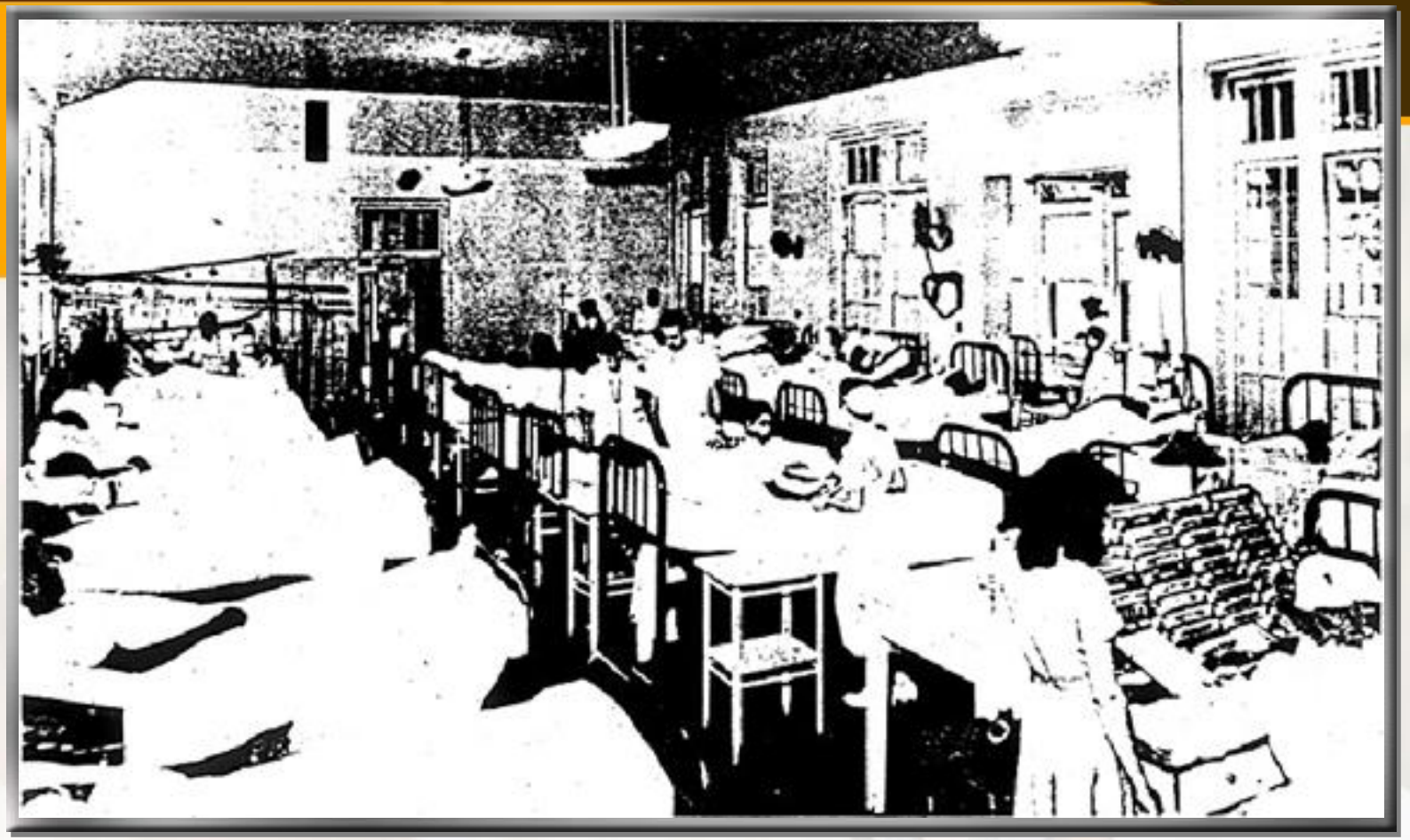

IMHOTEP, GOD OF MEDICINE

CARDIOLOGY

Richard Allen Williams

Daniel Hale Williams, M.D. (1856-1931). In 1893 he performed the first successful operation on the human heart, thus paving the way for the DeBakeys, Cooleys and Barnards of our day. Schomburg Collection


J. MARION SIMS: GYNECOLOGIC SURGEON



A black surgical ward in Charleston's segregated "Old Roper" Hospital, c. 1950. Although patients were all black, the professional staff here were all white. Courtesy of the Waring Historical Library. Medical University of South Carolina.

Words Of Wisdom

Those Who Fail To Heed

The Lessons Of History

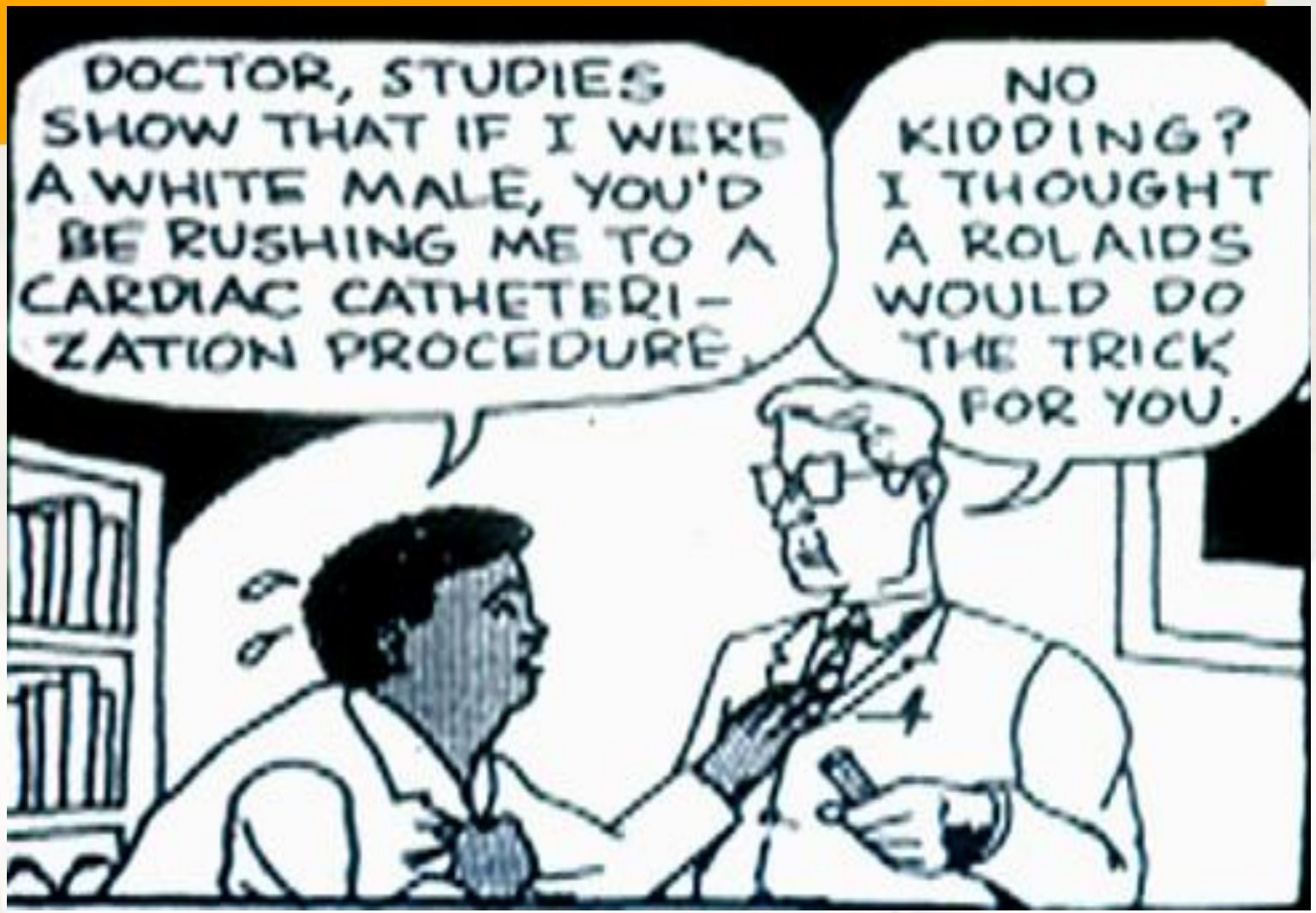
Are Destined To Repeat Them.

-Santayana

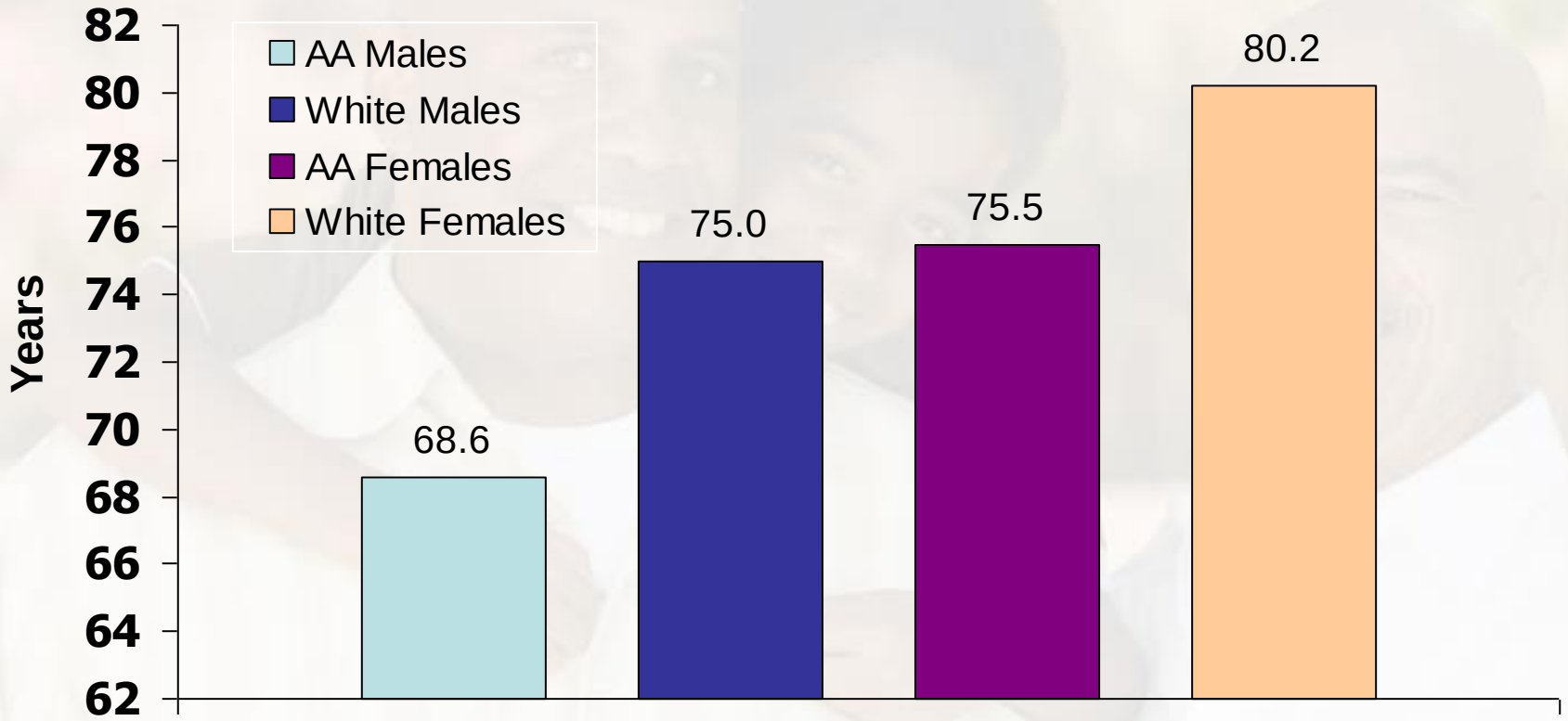
Evidence of Racial and Gender Bias in Medical Procedures and Treatment

1. Treatment of cardiac arrest
2. Selection of patients for cardiac catheterization
3. Coronary artery bypass graft surgery (CABG)
4. Thrombolytic therapy
5. Percutaneous transluminal coronary angioplasty (PTCA)
6. Selection of patients for treatment to prevent stroke


GIVE IT TO ME STRAIGHT, DOC.. I CAN TAKE IT.. WHAT'S WRONG WITH ME?
YOU'RE NOT A WHITE MALE.


DOCTOR, STUDIES SHOW THAT IF I WERE A WHITE MALE, YOU'D BE RUSHING ME TO A CARDIAC CATHETERI-ZATION PROCEDURE.
NO KIDDING? I THOUGHT A ROLAIDS WOULD DO THE TRICK FOR YOU.

Estimated Life Expectancy: 2001

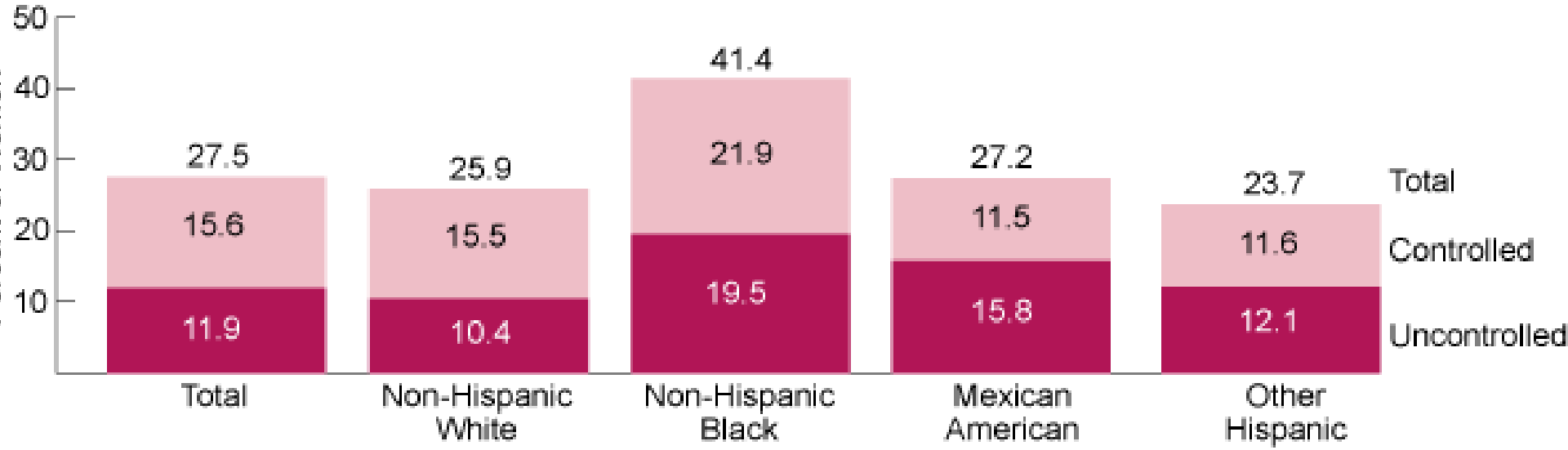


National Vital Statistics Reports. 2004;52:33–34.

THE PROBLEM

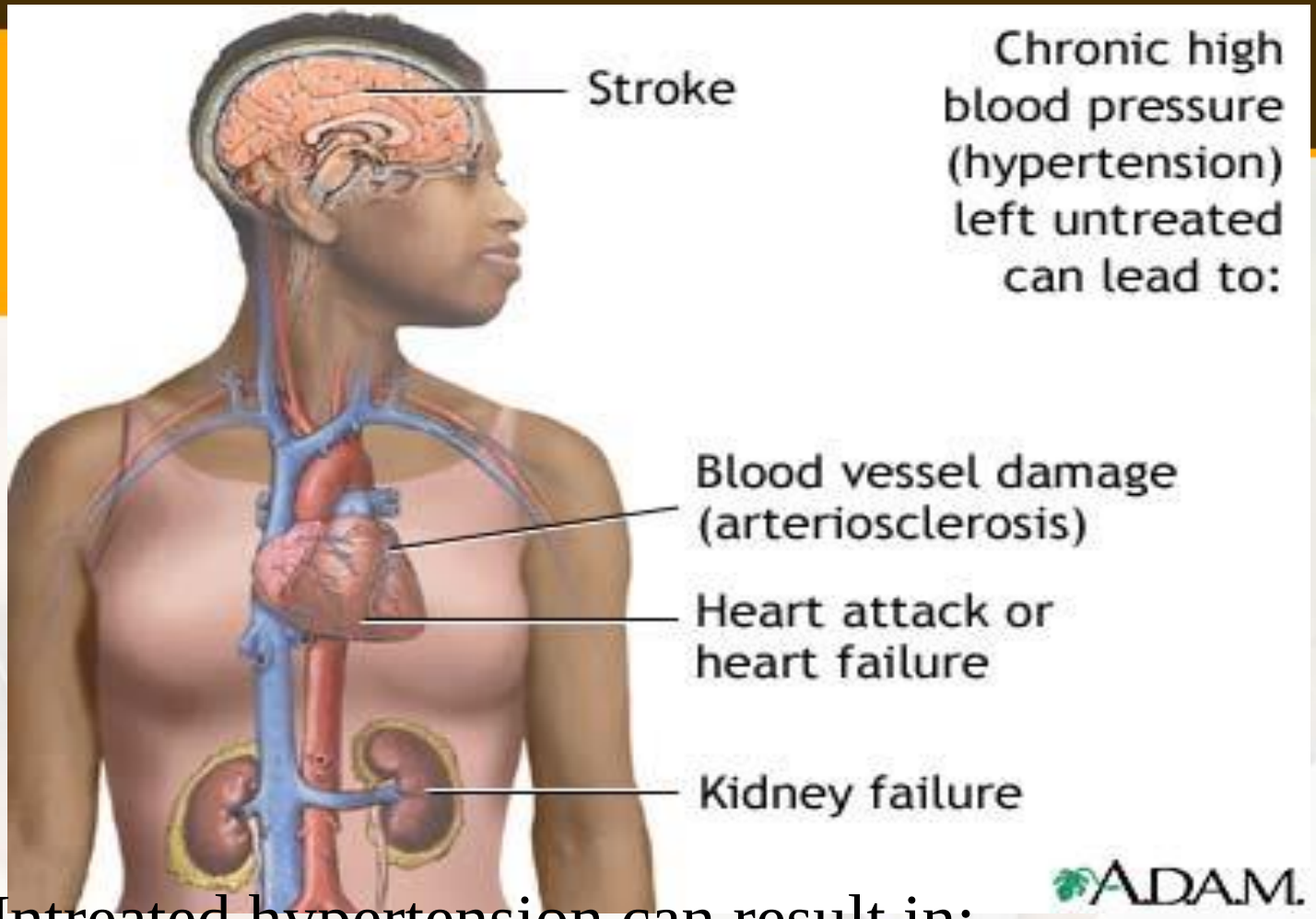
- HYPERTENSION
- STROKE
- HEART FAILURE
- MYOCARDIAL INFARCTION
- END-STAGE RENAL DISEASE
- ALL ARE MORE COMMON IN BLACKS

ligh Blood Pressure Among Women Aged 18 and Older,* by Race/Ethnicity,** 2007–2010



*ncludes a measured systolic pressure (during heartbeats) of ≥140mmHg or a diastolic blood pressure (between eartbeats) ≥90mmHg (uncontrolled hypertension, with or without blood pressure-lowering medication) and ormal blood pressure (≤140/90mmHg) with reported current medication use (controlled hypertension); ercentages may not add to totals due to rounding; estimates are age-adjusted. **The samples of American dian/Alaska Native, Asian, Native Hawaiian/Pacific Islander, and persons of multiple race were too small to roduce reliable results.*

ource: Centers for Disease Control and Prevention, National Center for Health Statistics. National Health and utrition Examination Survey, 2007-2010. Analysis conducted by the Maternal and Child Health Epidemiology nd Statistics Program.



- Untreated hypertension can result in:
  - Arteriosclerosis --Kidney damage
  - Heart Attack --Stroke
  - Enlarged heart --Blindness

HEART FAILURE:

- 5 MILLION CASES, 500,000/YR
- DEATH RATE 3 TIMES HIGHER IN BLACKS
- HYPERTENSION IS MAJOR RISK IN BLACKS, CORONARY DISEASE IN WHITES

EPIDEMIOLOGY, INCIDENCE, PREVALENCE, AND MORTALITY OF HEART FAILURE

- **HF IS THE ONLY CVD THAT IS INCREASING IN PREVALENCE**
- **IN 2010, 6.6 MILLION (2.8%) OF U.S. ADULTS HAD HF**
- **PREVALENCE IS EXPECTED TO INCREASE BY ABOUT 25% BY 2030**
- **ANNUAL INCIDENCE OF HF IN WHITES IS 6 PER 1,000 PERSON-YEARS VS 9.1 IN BLACKS (AHA)**
- **INCIDENCE OF NEW HF BY RACE AND ETHNICITY (ARIC):**
  - **CHINESE AMERICANS: 1.0 PER 1,000**
  - **WHITE AMERICANS: 2.4**
  - **HISPANIC AMERICANS: 3.5**
  - **AFRICAN AMERICANS: 4.6**

HF IS 20 X MORE FREQUENT BEFORE AGE 50 IN BLACKS THAN IN WHITES

BLACKS ARE 45% MORE LIKELY TO DIE WHEN HOSPITALIZED WITH HF THAN WHITES

DISPARITIES IN HOSPITALIZATIONS FOR HF

HOSPITALIZATIONS FOR HF DECLINED 30% OVERALL FROM 2002-2013

HOWEVER, THE RATE FOR BLACKS WAS 200% HIGHER THAN FOR WHITES DURING THAT PERIOD

THE RATE FOR HISPANICS DROPPED MUCH FASTER THAN FOR WHITES

DISPARITIES IN DISEASE BURDEN HAVE NOT IMPROVED FOR BLACKS AND MALES IN THE LAST DECADE

Source: Ziaeian et al, Circulation: Cardiovascular Quality and Outcomes (2017)

CLINICAL DIFFERENCES IN HF BETWEEN BLACKS AND WHITES

BLACKS TEND TO HAVE MORE SYSTOLIC HEART FAILURE (HFrEF)

INCIDENCE OF DIASTOLIC HEART FAILURE (HFpEF) IS ABOUT THE SAME BETWEEN BLACKS AND WHITES

HYPERTENSION IS THE MAJOR HF RISK FACTOR FOR BLACKS ALONG WITH LVH

CHD IS THE MAJOR RISK FACTOR FOR WHITES

NONISCHEMIC CARDIOMYOPATHY PREDOMINATES IN BLACKS

ISCHEMIC CARDIOMYOPATHY PREDOMINATES IN WHITES

Heart Failure

- HT is the leading cause of HF in AA
- HF affects 3.5% of AA men and 3.1% of AA females over 20 years, and 5% over 65 years
- HF outcome is poorer in AA patients with 45% higher rate of functional decline or death in 6 months c/w white

TREATMENT OF HF FOR AFRICAN AMERICANS

- THERE IS INSUFFICIENT EVIDENCE OF A THERAPEUTIC DIFFERENCE BETWEEN BLACKS AND WHITES FOR MOST TREATMENT MODALITIES (ACEI, ARBS, BB EXCEPT BUCINDOLOL, ALDOSTERONE ANTAGONISTS, DIURETICS, CCBS, ICD, CRT, LVADS, SALT RESTRICTION)

- HYDRALAZINE AND ISOSORBIDE DINITRATE (HYD-ISDN) IN FIXED DOSE COMBINATION IS CONSIDERABLY MORE EFFECTIVE IN BLACKS THAN IN WHITES AND IS A CLASS IA RECOMMENDATION OF THE ACC/AHA GUIDELINES FOR TREATMENT OF HF IN AFRICAN AMERICANS

THE BIDIL CONTROVERSY

- A FIXED DOSE COMBINATION OF HYD 37.5 MGS AND ISDN 20 MGS WITH NYHA STAGE III OR IV HF ON STANDARD RX WAS VASTLY SUPERIOR TO PLACEBO IN A RCT OF A BLACK COHORT (AFRICAN AMERICAN HEART FAILURE TRIAL OR AHEFT, TAYLOR AL ET AL, NEJM, 2004)
- A 43% SURVIVAL ADVANTAGE IN THE ACTIVE DRUG GROUP LED TO EARLY TERMINATION OF THE STUDY
- RATE OF FIRST HOSPITALIZATION WAS -39%
- IMPROVEMENT OF QOL SCORES WAS +52%
- DESPITE THESE EVIDENCE-BASED BENEFITS, USE OF THE FIXED DOSE COMBINATION TO TREAT HF IN BLACKS HAS BEEN LIMITED. THIS IS CONSIDERED A HEALTHCARE DISPARITY

Risk Factors for Disparate Healthcare

- Poverty
- Racism
- Discrimination
- Bias
- Language barriers
- Geographical barriers
- Socioeconomic status
- Immigrant status
- TRUST (or lack thereof)

Institute of Medicine. Summary of: *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare*. 2003.

SUMMARY OF FINDINGS
From IOM Report

Racial and ethnic disparities in health care exist and, because they are associated with worse outcomes in many cases, are unacceptable.

Racial and ethnic disparities in health care occur in the context of broader historic and contemporary social and economic inequality, and evidence of *persistent* racial and ethnic discrimination in many sectors of American life.

Many sources – including health systems, health care providers, patients, and utilization managers – contribute to racial and ethnic disparities in health care.

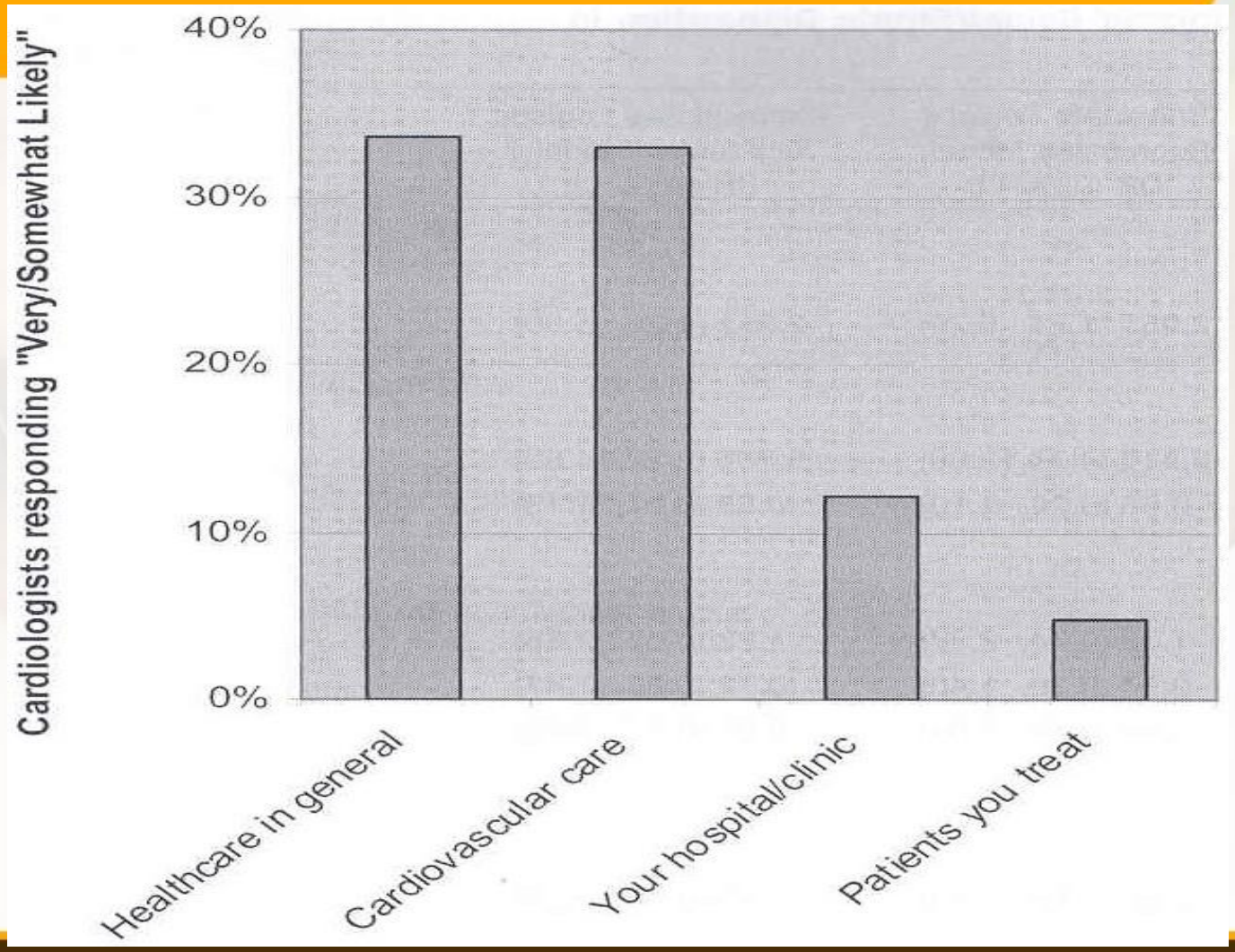
SUMMARY OF FINDINGS

From IOM Report (Continued))

Bias, stereotyping, prejudice, and clinical uncertainty on the part of healthcare providers may contribute to racial and ethnic disparities in healthcare.

Racial and ethnic minority patients are more likely than white patients to refuse treatment, but differences in refusal rates are generally small, and minority patient refusal does not fully explain healthcare disparities.

Does Race Impact Care Decisions?

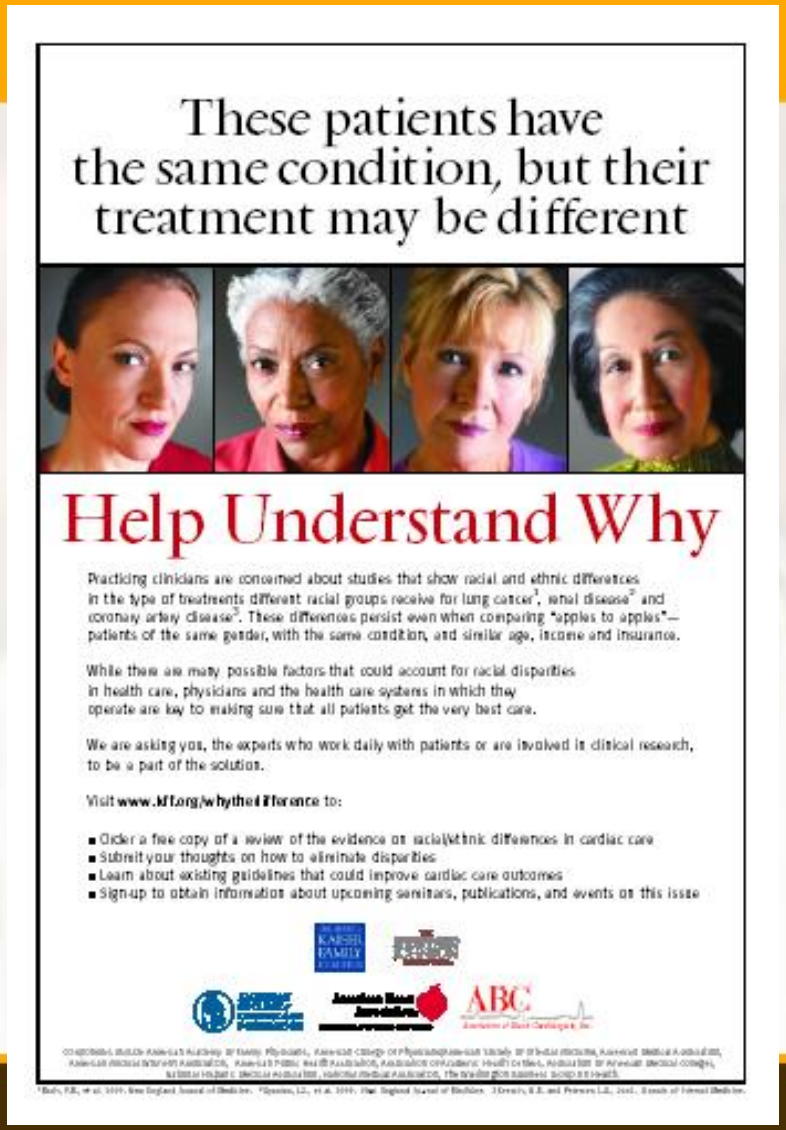


Source: Lurie N et al. *Circulation* 2005;111:1264-1269

CDC Eliminate CVD disparities by 2010

- Reduce deaths from heart disease among AA by 30%
- Reduce deaths from stroke among AA by 47%

Kaiser Family Foundation Ad Ca



Ad appeared in leading medical publications:

Journal of the American Medical Association

Today in Cardiology

Journal of the American College of Cardiology

Circulation – The Journal of the American Heart Association

Lessons Learned

- Takes time
- Takes resources
- Takes commitment
- Gather evidence
- It is everyone’s work

Summary

- Biologic & Genetic factors
- Environmental factors
- Socio economic factors
- Access & Cost
- Practice Bias
- Lack of Diversity in Providers
- Need for Leadership and commitment

SUGGESTED STRATEGIES FOR MANAGING CVD IN BLACKS

- RECOGNITION OF CULTURAL DIFFERENCES
- INDIVIDUALIZED TREATMENT
- APPRECIATION OF RACIAL PECULIARITIES
- IMPORTANCE OF OPEN ACCESS TO CARE
- SELECTION OF THE MOST APPROPRIATE DRUGS
- DEVELOPMENT OF IMPROVED COMMUNICATIONS SKILLS
- INCREASED EFFORTS TO SCREEN AND EDUCATE PATIENTS

Where There Is No Vision,
The People Perish.

Proverbs 29:18

John F. Kennedy

If we cannot end our differences,
at least we can make
the world safe for diversity,
for in the final analysis,
our most basic link
is that we all inhabit
this small planet.
We all breathe the same air,
we all cherish our children's future,
and we are all mortal.

John F. Kennedy

- “WE MAY HAVE COME HERE ON DIFFERENT SHIPS, BUT WE’RE IN THE SAME BOAT NOW.”