



# Health Care Disparities and Pharmacy

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# Introduction

- Definitions
- Why are the disparities important?
- What are racial and ethnic health care disparities?
- What is the history of the disparities?
- How have the health care disparities affected the Pharmaceutical Industry?

# Definitions

- **Race** Classification of humans based on genetic characteristics
- **Ethnicity** Classification of humans based on historical connection by a common national origin or language
- **Culture** A frame of reference within a societal group handed down through the generations including accepted behavior patterns and beliefs
- **Cultural Competence** The ability to see beyond one's own cultural background and be sympathetic and responsive to the culture of other societal groups. To account for the needs of other cultures.
- **Diversity** Differences and distinctions in human qualities including but not limited to age, ethnicity, gender, physical abilities, race, religion, physical appearance, political beliefs and sexual orientation.

# Why are the disparities important?

- **Medical costs**
- **Economic costs**
- **Social costs**

# Medical Costs

- **Minorities are more likely than whites to**
  - Contract many diseases
  - Have more advanced disease at diagnosis
  - Receive less aggressive treatment
- **For a variety of diseases including**
  - Heart Attack
  - Cancer
  - Stroke
  - HIV
  - Diabetes
  - Congestive Heart Failure
  - High Cholesterol

# Medical Costs

- **Minorities are also less likely than whites to**
  - Get appropriate testing for disease
  - Receive state-of-the art treatment
  - Have a primary care doctor
  - See any physician within a year
- **Disease course and treatment of diseases are historically based on studies of white patients.**

# Economic Costs

- How much money could actually be saved if we could improve minority health?
- The Pennsylvania Health Care Cost Containment Council report (HC4)
  - Chest Pain
  - Congestive Heart Failure
  - Diabetes
  - Heart Attack
  - Kidney Failure
  - Stroke
  - Transient Ischemic Attack

# Economic Costs

- **Estimated Pennsylvania 2001 possible hospital savings for DM, Renal Failure, cardiovascular and cardiac problems is > \$68,000,000**
- **Estimated US 2001 possible hospital savings for DM, Renal Failure, cardiovascular and cardiac problems is > \$1,360,000,000**

# Economic Costs

- **Chronic illnesses cost the economy  
> \$1,000,000,000 yearly**

# Social Costs

- **Death rates per 1000 also increased for minorities vs. whites**
  - Death rates for **African-Americans** are 30% higher for cancer and heart disease, 40% higher for stroke, and 140% higher for diabetes.
  - Death rates for **Hispanics** are 55% higher for diabetes and 80% higher for liver disease.
  - Death rates for **Hispanics** are 200% higher and for **African-Americans** are 760% higher for AIDS

# Social Costs

## Disease

Age	25 – 44	45 – 54	55 – 64	65 – 74	75 - 84
White death rate per 100,000*					
Black death rate per 100,000*					
Difference between rates					
Black population per 100,000**	104	38	22	16	9
Excess lives lost					
Average years of Life lost in age group***	45	31	23	15	9
Total years of life lost for all within the age group					

**Total African American Lives Lost/Year =**

**Total Estimated African American Life-Years Lost/Year =**

\*National Center for Health Statistics; Death rates by race/ethnicity, age and cause, 1994-1998, 2001

\*\*U.S. Bureau of the Census, National Vital Statistics Report (vol.9, no. 11) 1999, 2001

\*\*\*National Center for Health Statistics, National Vital Statistics Report (vol.50, no. 6) 2002

# Social Costs

- **Cerebrovascular Disease / Stroke**
  - Total African American Lives Lost / year = approximately 7,000
  - Total Estimated African American Life-Years Lost / year = approximately 154,000

# Social Costs

- **Cerebrovascular Disease / Stroke (cont.**
  - **Total Estimated Life-Years Lost / year for Latinos 45-64 y.o.= approximately 6,000**
  - **Total Estimated Life-Years Lost / year for Asian/Pacific Islanders 45-74 y.o.= approximately 2,000**

# Social Costs

- **Cancer**

- **Total African American Lives Lost / year = approximately 15,000**

- **Total Estimated African American Life-Years Lost / year > 353,500**

# Social Costs

- **Diabetes**

- **Total Lives Lost / year >1,500 for Latinos > 45 y.o.**
- **Total Estimated Life-Years Lost / year >23,500 for Latinos > 45 y.o.**

# Social Costs

- **Cardiovascular Disease**
  - **Total African American Lives Lost / year >30,500**
  - **Total Estimated African American Life-Years Lost / year > 700,000**

# History of the Disparities

- Segregated U.S. healthcare system since slavery and reconstruction period
- Reinforced by the Flexner report in 1910
  - Led to decreased number of available minority physicians
- Mandated integration in 1966 led to the closing or merger of nearly 70 traditionally minority facilities while white facilities experienced growth and prosperity through Medicare
  - This had a devastating effect on minority access to care
- Studies showing the disparities started being published in the mid-1980's.
- NEJM 1999 cardiac catheterization study also widely reviewed by lay press
- Congress requests IOM to study & report on disparities in 1999

# History of the Disparities IOM report

- Selected Findings:
  - The disparities exist.
  - They exist within persistent racial and ethnic discrimination of American life.
  - There are many causes, including lack of racial and/or ethnic concordance between patient and provider, payment structures that increase minority barriers, lack of patient empowerment, and “**bias, stereotyping, prejudice, and clinical uncertainty on the part of healthcare providers.**”
  - The refusal of treatment by minorities is not sufficient to account for the disparities.

# History of the Disparities IOM report

- Selected Recommendations
  - Increase awareness of the disparities
  - Increase the number of minority health professionals
  - Increase the use of evidence based guidelines
  - Increase the use of interpretation services
  - Increase cross cultural education of all health care professionals
  - Increase data collection and monitoring
  - Increase research on the topic of disparities
  - A variety of other legal, political and health system recommendations

# Pharmacy & Health Care Disparities

## Pharmaceutical Education

- **Pacific University School of Pharmacy**
  - Mission and Vision Statement
    - ...graduating pharmaceutical care experts ...who are agents of change, ...reducing health care disparities and reducing deficiencies in health literacy.
- **Chicago State University School of Pharmacy**
  - Mission and Vision Statement
    - The College embraces the mission of the University...provision of culturally competent care and reduction of health care disparities.
- **Virginia Commonwealth University**
  - Curriculum Goals for the Doctor of Pharmacy Program
    - ...minimize health care disparities.

# Pharmacy & Health Care Disparities

## Pharmaceutical Societies

- American College of Clinical Pharmacy: 2002: theme of cultural competence; created task force on cultural competence
- American Society of Health-System Pharmacists: 2003: Ad Hoc Committee on Ethnic Diversity and Cultural Competency; report published 2005
- American Pharmacists Association: 2005: policies to facilitate access to resources to achieve cultural competence. 2006: policies expanding 2005: culturally competent health care into all communities. 2005-6 student meeting theme was cultural competence.
- American Association of College of Pharmacy: 2006: interim meeting theme Cultural Competence: Closing Gaps and Expanding Access.

# Pharmacy & Health Care Disparities

## Pharmaceutical Research

- 1987: NIH 1<sup>st</sup> published guidelines for minority inclusion in government-funded clinical studies; doesn't affect industry funded research
- 1996: African-Americans, Hispanics & Asians made up 33% of the U.S. population, but only 8% of pharmaceutical trials (6%, 1% & 1% respectively). This was down 4% from the previous year (12% in 1995).
- African-American cancer trial participants: 1996=11%  
2002=7.9%
- Hispanic clinical trial participants: 1996=3.7% 2002=3%
- Bidil

# Pharmacy & Health Care Disparities

## Pharmaceutical Research

- 2007: “Nearly 700 Medicines in the Pipeline Offer Hope for Closing the Health Gap for African Americans” PhRMA
  - Cancer 229
  - Heart Disease 114
  - Diabetes 95
  - Infectious Disease 91
  - Lung/Respiratory Disorders 77
  - Obesity 35
  - Kidney Disease 27
  - Stroke 25
  - Lupus 13
  - Sickle Cell Disease 3

# Pharmacy & Health Care Disparities

## Pharmacy and Health Care Disparity Programs

### Healthy Hoops

- Six-month community based Asthma/Health Management program for children and their families.
- Uses incentives such as tickets to the circus for the entire family and basketball camp to encourage ongoing participation.



# Pharmacy & Health Care Disparities

- Started in West Philadelphia, expanded throughout Philadelphia and its suburbs, and to other states such as South Carolina and New Mexico.
- In 2006, Healthy Hoops won the NCQA “Recognizing Innovation in Multicultural Health Care” award



# Pharmacy & Health Care Disparities

## 2004 Patient Results

- 48% of children were using controller medication at baseline evaluation

After the Healthy Hoops screening, 77% were on prescribed controller therapies

- At baseline evaluation, 36% of children experienced excessive nocturnal awakenings due to asthma sleep disturbances

Nocturnal awakenings decreased by 10% after Healthy Hoops

- 10% of children required hospital admissions for asthma in the six months before Healthy Hoops

Hospitalizations dropped to 2% after Healthy Hoops

- 40% of children had Emergency Room visits for asthma in the six months prior to Healthy Hoops participation

After enrollment, ER use dropped to 6%.



# Pharmacy & Health Care Disparities

- Healthy Hoops has been presented to numerous audiences due to its role in fighting Health Care Disparities.
- Schering Plough and AstraZeneca provided funding for Healthy Hoops





**Thank you!**

**Questions?**

