Healthcare Disparities: Diabetes

ACOI Minority Health Committee

2012

Healthcare Disparities

- National Institute of Health
 - "Health Disparities are differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exist among specific population groups in the United States"
- Health and Human Services Agency
 - One of Healthy People 2010's overarching goals is to eliminate health disparities.

Burden of Diabetes

- 6th leading cause of death in the year 2000
- Affects more than 20.8 million Americans
- Different types
 - Type 1 diabetes: "juvenile" or "insulin dependent"
 - Type 2 diabetes: "adult onset"
 - Accounts for 90-95% of diabetes cases
 - Risk factors: age, obesity, family history, history of gestational diabetes, race/ethnicity
 - Gestational diabetes
 - Occurs more frequently in African Americans, Hispanic/Latino Americans, and American Indians
- Serious consequences/premature death

African Americans

- Face 2 in 5 risk for diabetes
- More than twice as likely to have diabetes compared to whites
- From 1980-2005: age adjusted prevalence of diagnosed diabetes
 - Doubled among black males
 - Increased 69% among black women

Hispanics/Latino Americans

- Hispanics born in the year 2000 face a 2 in 5 risk for diabetes
- More than twice as likely to have diabetes compared to whites
- From 1997-2005: age adjusted prevalence
 - Increased 16% among hispanic males
 - Increased 21% among hispanic females

American Indians/Alaska Natives

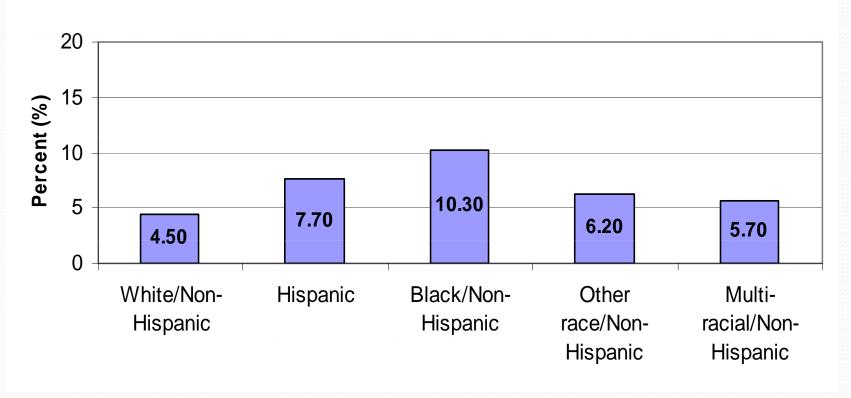
• American Indians aged 10-19 have the highest prevalence of type 2 diabetes

Complications

- Complications such as end-stage renal disease, retinopathy, and amputations among minorities is disproportionately high
- Diabetic nephropathy, as well as kidney and liver failure, is three to seven times higher in African Americans, Mexican Americans, and Native Americans
- Rates of amputations are two to four times higher than among Anglos.

Health Disparities: Race/Ethnicity & Diabetes

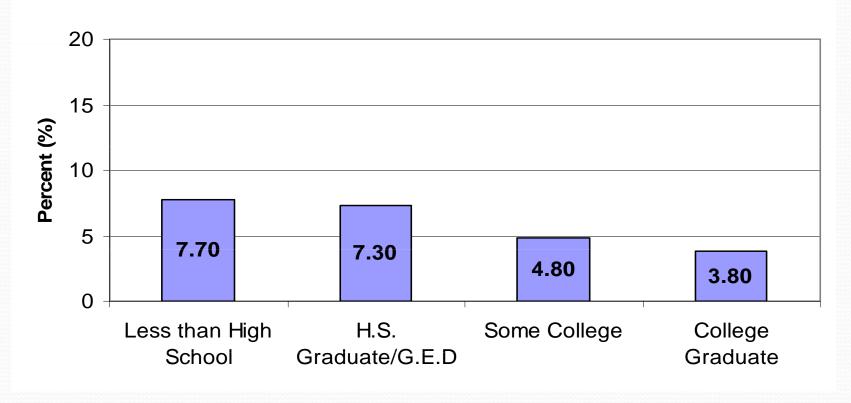
Prevalence of Persons with Diabetes Aged 18 Years and Older by Race/Ethnicity, 2007



Source: Behavioral Risk Factor Surveillance System, Health Statistics Section, CDPHE

Health Disparities: Education & Diabetes

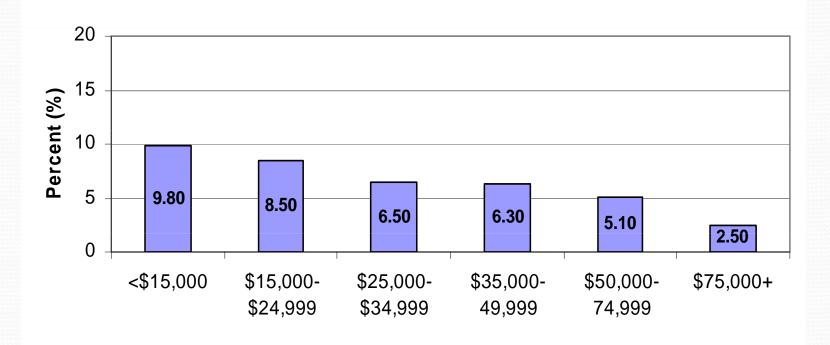
Prevalence of Persons with Diabetes Aged 18 Years and Older by Education Level, 2007



Source: Behavioral Risk Factor Surveillance System, Health Statistics Section, CDPHE

Health Disparities: Income & Diabetes

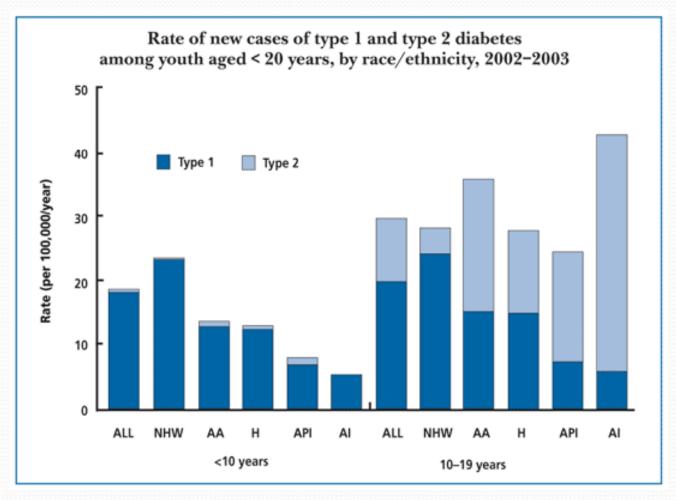
Prevalence of Persons with Diabetes Aged 18 Years and Older by Annual Household Income, 2007



Source: Behavioral Risk Factor Surveillance System, Health Statistics Section, CDPHE

Incidence of Diabetes Among

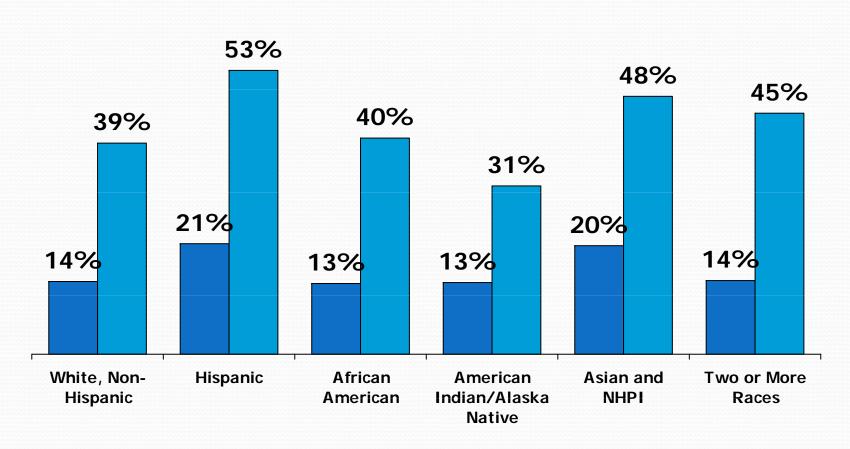
Youth



Source: SEARCH for Diabetes in Youth Study. Liese et al. *Pediatrics*. 2006;188:1510-18. NHW=Non-Hispanic whites; AA=African Americans; H=Hispanics; API=Asians/Pacific Islanders; AI=American Indians

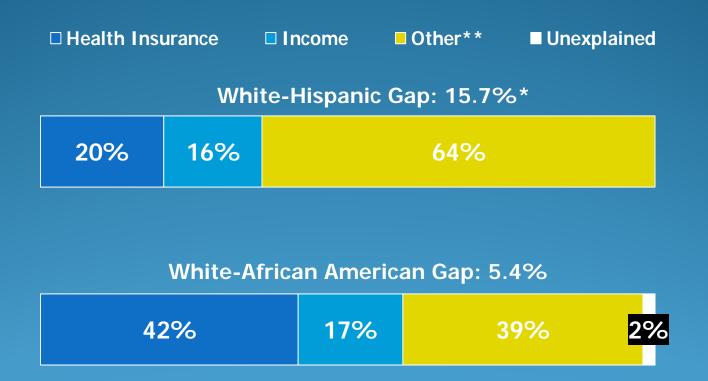
No Doctor Visit in Past Year for Nonelderly Adults by Race/Ethnicity and Insurance Status, 2005-2006







Role of Health Insurance in Explaining Racial/Ethnic Gap in Having a Regular Source of Care

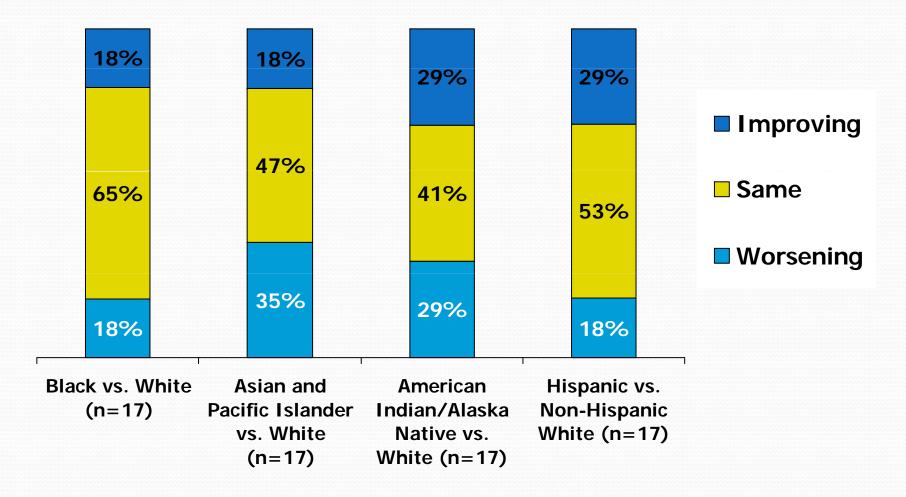




^{*}Researchers did not separate income from other personal socio-economic factors

^{**}Other refers to local area demographics and health care system factors SOURCE: Zuvekas & Taliaferro, 2003, analyzing 1998 MEPS data

Changes in Quality of Care Disparities Over Time: Summary by Race/Ethnicity, 2000-2001 to 2005-2006



NOTES: "Improving" means disparity is becoming smaller over time; "worsening" means disparity becoming larger over time. Data on all measures are not available for all groups; "n" refers to the number of measures on which the groups were compared. Totals may not add to 100% due to rounding. Time period differs by measure and includes oldest and newest years of available data.





What is the Goal?

- Reduce complication rate and number of deaths
- Multidisciplinary approach
 - Increase awareness
 - Increase patient education
 - Encourage lifestyle modification
 - Regular office visits

Delivery of Culturally Competent Care

- Requires practitioner competencies in specific areas:
 - cultural knowledge (beliefs and values)
 - Dismiss belief that minorities do not care about their health
 - specific skills in intercultural communication
 - tripartite cultural assessment
 - selecting among levels of intensity of cultural interventions (neutral, sensitive, innovative, or transformative)
 - adapting patient education
 - developing community partnerships.

Beliefs as Barriers

- Patients may not regularly participate in health screenings, including beliefs, priorities, and access.
- Lack of knowledge about services, transportation, financial issues, and acceptability of services.
- Patients may not understand diabetes is an illness with significant complications

Reducing Disparity

- Awareness and sensitivity of cultural diversity
- Appreciation of different religious practices
- Physician education of healthcare disparities
- Education of family members as well as patients
- Assistance in navigating the healthcare system

- Select and partner with interpreters appropriately.
- Adapt communication/interaction patterns
 - Use appropriate strategies to demonstrate respect
 - Use indirect (rather than direct) communication when necessary
- Perform targeted cultural assessments (for defining problems, modifying/constructing interventions, and establishing participating outcome goals)

- Modify diabetes education programs.
- Determine patients' preferred learning style: visual, auditory, experiential; and use appropriate teaching modality (talking circles, one-on-one, didactic, lay model).
- Assess patients' reading level.
- Evaluate reading level of patient education materials.
- Use cultural themes, metaphors, or folktales to deliver health messages.

- Elicit information about patients' logic of noncompliance and involve patients in problem solving to devise strategies to address patients' issues.
- Determine applicability of a strategy demonstrated effective with one particular population to a particular individual within that population or to a different population.
- Work in partnership with ethnic communities.
- Assess personal and agency level of cultural competence and take actions to address deficiencies.

- Practitioners often indicate that these skills are not feasible because they lack time, resources, and/or information (and sometimes motivation) to comply with these practice standards.
- Yet they fail to recognize that these are the same reasons offered by patients who have difficulties managing a recommended therapeutic regimen.

Intervention Strategies

- Increase early screening and early treatment
- Improve care for control of diabetes
- Treat major complications:
 - Regular eye exams
 - Regular foot exams
- Clinical trials

Intervention Strategies

- Routine office visits to include
 - Eye and foot examinations
 - Bloodwork to include HgbA1C, lipid panel, renal function, etc
 - Blood pressure control
 - Blood glucose control
 - Patient education
 - Awareness of diabetes and its complications
 - Importance of blood glucose control
 - Self screening (foot, eye, blood glucose)
 - Lifestyle modification: diet and exercise, smoking, alcohol

Programs and Initiatives

- Project DIRECT
- National Diabetes Education Program (NDEP)
- SEARCH for Diabetes in Youth Study

Project DIRECT

- Multi-year community diabetes demonstration project
- Funded primarily by the CDC
- Focused on reducing the burden of diabetes and its complications in the African American community
- Provides insight into preventive care services and self-care behaviors
- Findings:
 - Close to half have never received any from of diabetes education
 - Less than half do not have annual A1C examinations
 - Most are sedentary
 - More than half monitor their blood glucose once daily or less

National Diabetes Education Program (NDEP)

- Co-sponsored CDC and NIH initiative
- Promote early diagnosis of diabetes
- Prevent/delay onset of diabetes
- Improve treatment and outcomes for African Americans, Hispanics/Latinos, American Indians, Alaska Natives, and other high risk groups

SEARCH for Diabetes in Youth Study

- Address increasing incidence of type 1 and type 2 diabetes in youth
- Funded by CDC and other agencies
- Conducted in 6 geographically dispersed US populations encompassing ethnic diversity
- Prime objective: identify magnitude/trends of diabetes in youth, including African Americans and Hispanics/Latinos
- Findings:
 - African American youth had highest incidence rates
 - 1 in 500 hispanic youths have diabetes

Self Management

- Diabetes education
- Regular office visits
- Glucose monitoring
- Lifestyle modification
- Support groups

References

• Center for Disease Control: Office of Minority Health and Health Disparities