



Women, Diabetes, Obesity and Physical Activity

Presented by

Women's Health Council,

National Association of Chronic Disease Directors

Acknowledgements

- **NACDD Women's Health Council, Steering Committee members especially Nancy Libby Fisher**
- **NACDD Workgroup on Women, Diabetes and Physical Activity**





US Women

- **Women represent 51.1% of the population, 2003**
- **Distribution by gender is fairly even across all age groups except for older women - 57.5% 65 years and older are women**
- **Women in the middle years, 45-64, account for the largest population of women and represent 39.6%**



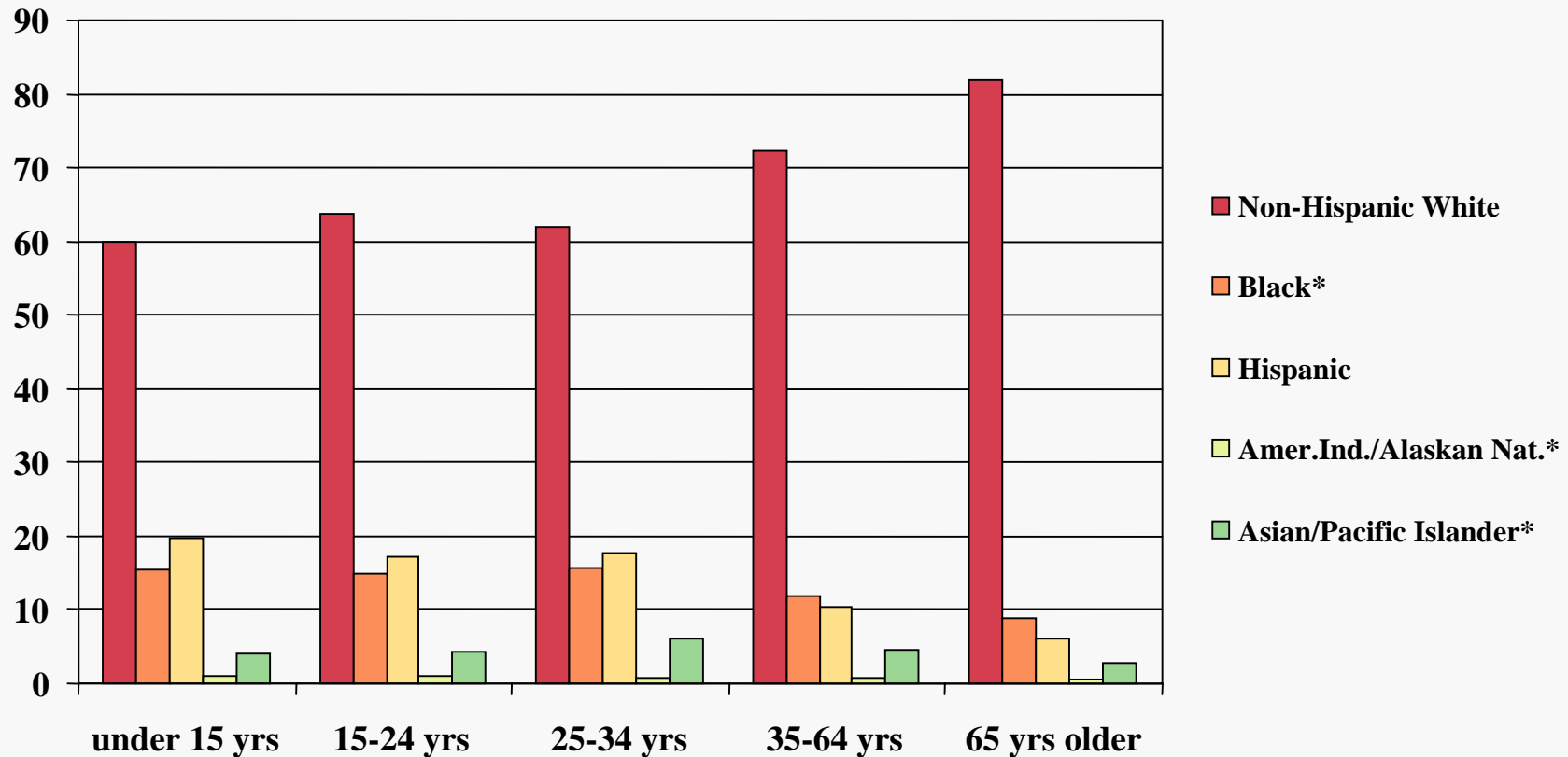
US Women, cont'd

- **Growing diversity among racial and ethnic distribution of women**
- **Young women 25 years and younger reflect the greatest diversity**
- **Women often function as the caregiver in households – 75% of all caregivers are women**
- **Of the 2.4 million grandparents raising grandchildren, 63% are women**



U.S. Female Population by Age and Race/Ethnicity, 2003

Source: U.S. Census Bureau, American Community Survey



The Literature Tells Us



- **Women's health is complex and multi-dimensional**
- **Major determinants of type 2 diabetes include obesity and sedentary lifestyles**
- **Physical activity among cohorts of women are determined by health status, physical, social, and environmental factors**



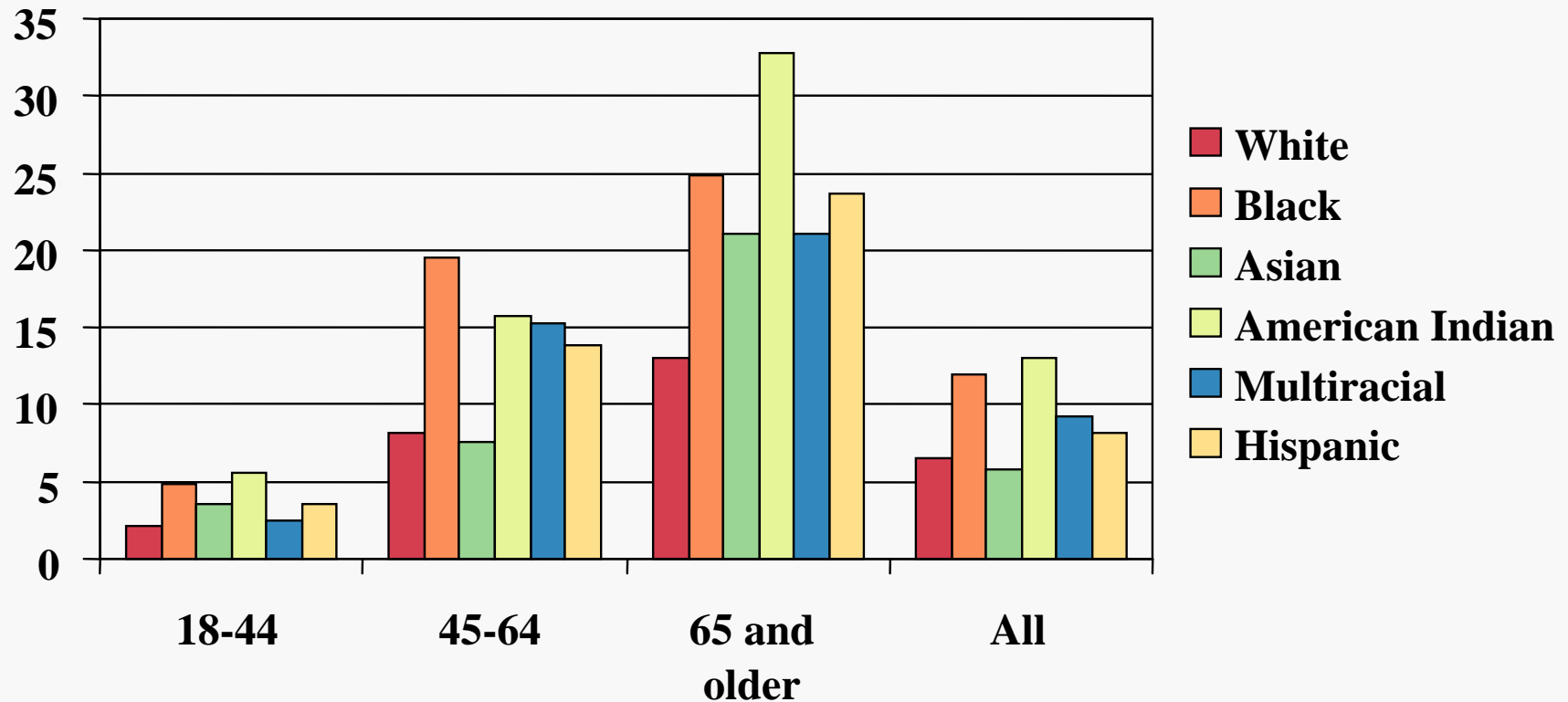
The Literature Tells Us



- **Public health professionals need understanding of**
 - **behavioral constructs**
 - **lay women's perceived definition of physical activity**
 - **health literacy and cultural norms**

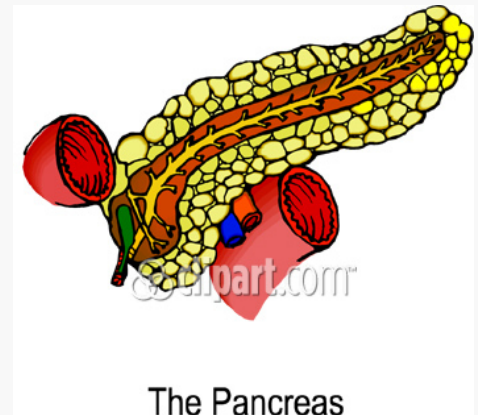


Diabetes Prevalence in US Women: Age and Race/Ethnicity BRFSS 2003



Diabetes

- **A complex chronic disease in which a person's carbohydrate metabolism is impaired and causes high levels of blood glucose.**
- **90% of all persons with diabetes have type 2 diabetes**
- **8% of the adult population has diabetes**
- **8.8% of adult women have diabetes**



The Pancreas



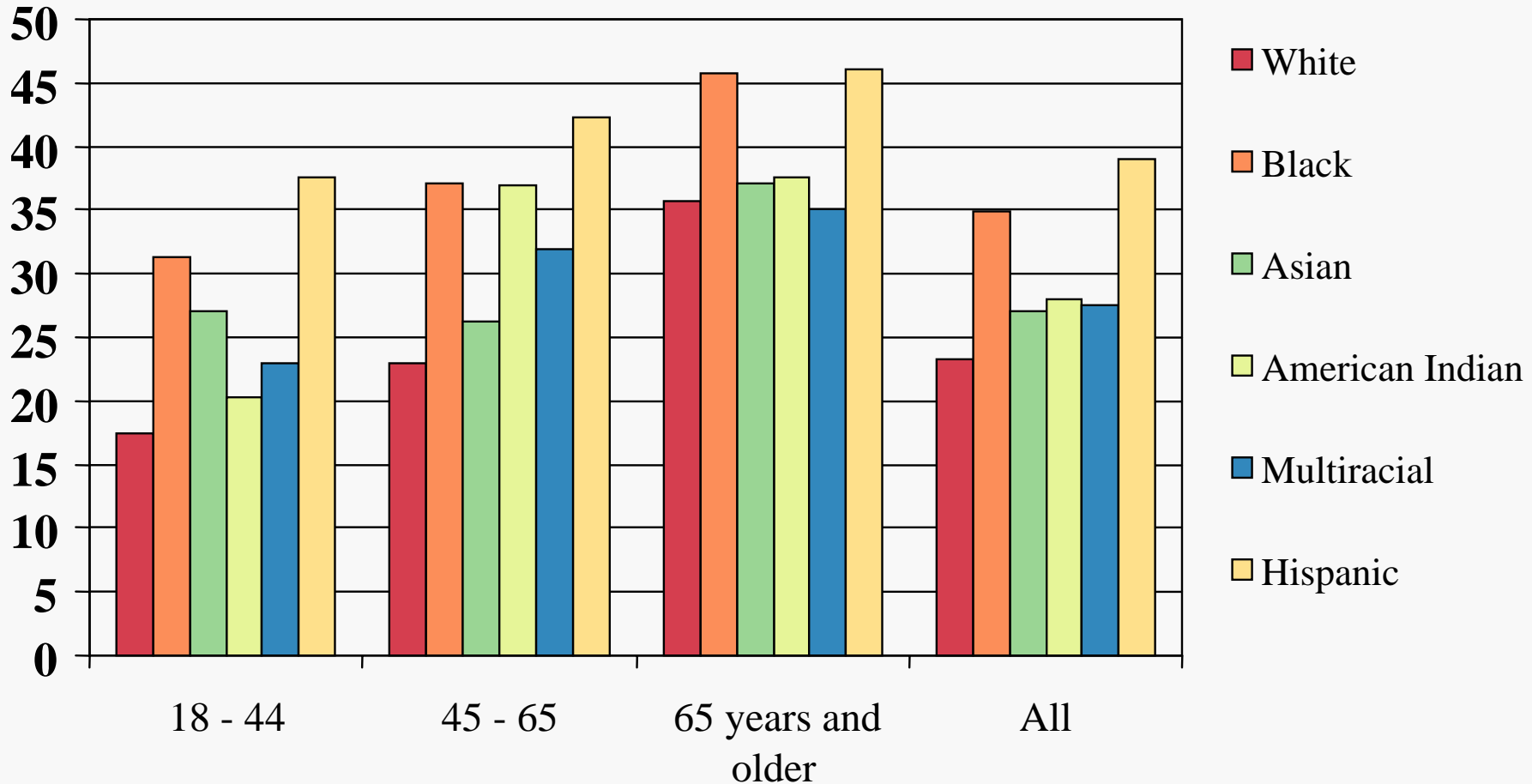
Diabetes Prevention and Control

- **Adherence to lifestyle recommendations**
 - **Physical activity of 150 minutes per week**
 - **7% weight loss by decreasing fat intake to 30% of total calories, and increasing fruit and vegetable consumption to 5 servings daily**
- **Individual belief that physical activity is beneficial, essential**
- **Individual belief of perceived risk**

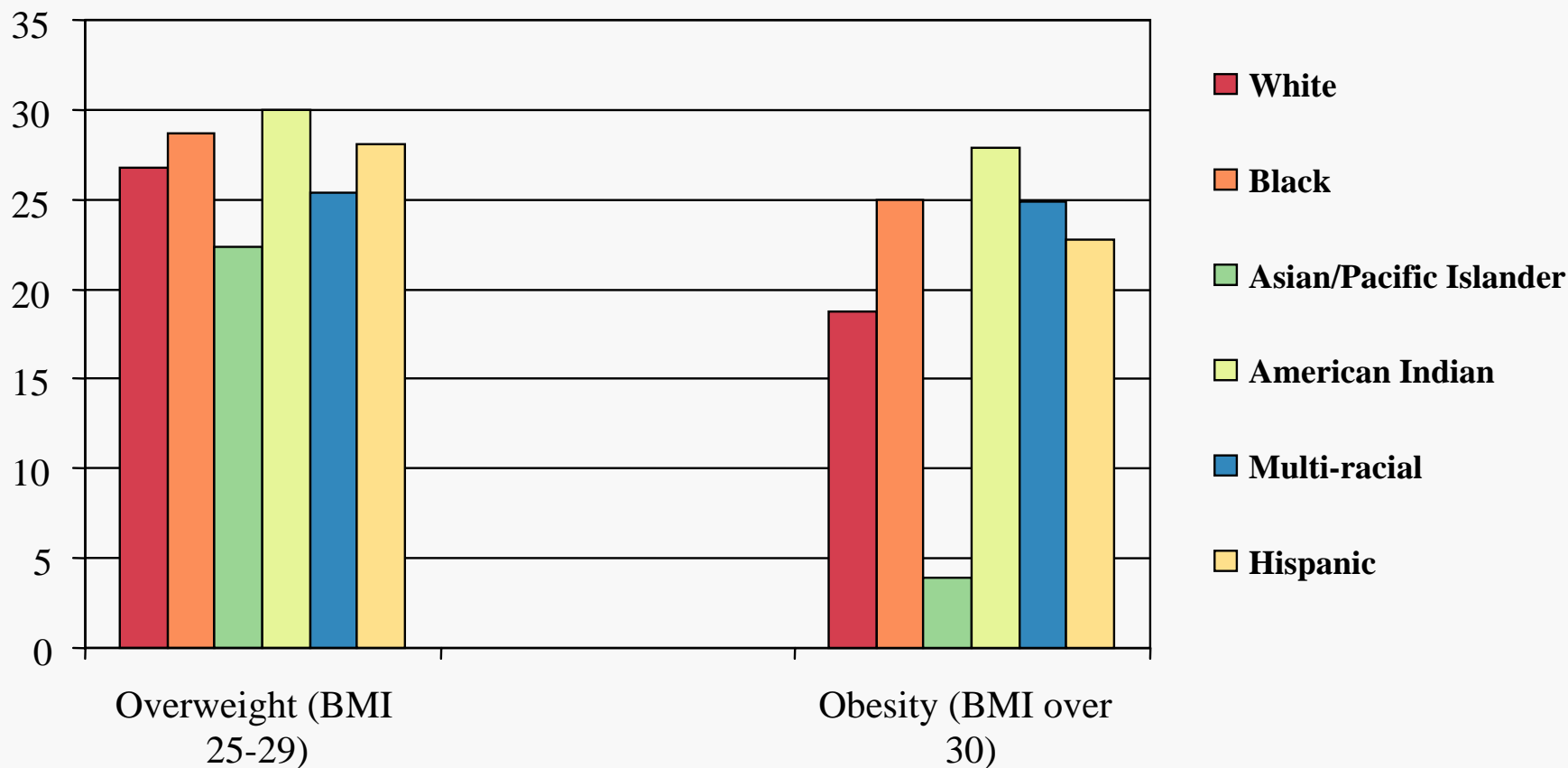


US Women, Prevalence of No Physical Activity In Past Month

By Age and Race/Ethnicity, BRFSS, 2003



US Women, Prevalence of Overweight and Obesity By Age and Race/Ethnicity, BRFSS, 2003



Physical Activity and Women

- **Personal correlates: younger age, general good health, high self efficacy**
- **Socio-ecological factors: knowing someone who exercises, attending religious services**
- **Physical factors: safety**
- **Interventions: access to facilities during working hours**



Women's Perceptions

- **Sports:** for men or professional athletes
- **Leisure time:** inactivity or luxury time (feel guilty taking time for physical activity)
- **Intensity:** stress when juggling tasks or unwanted duties
- **Sweat, increased heart rate, hard breathing:** stressful events - not physical activity



Low Literacy



- **Important variable as linked with prevalence to obesity, diabetes, sedentary lifestyle**
- **Associated with adverse outcomes, lack of compliance to treatment regimes**
- **Non-recognition of signs, symptoms of diseases**



Low Literacy cont'd

- **Lower interpretation skills**
- **Less ability to communicate issues**
- **Less understanding of concepts of health, illness, disease**
- **Lack cognitive skills to manage disease, behavior change, or prescriptions**
- **Less compliance with disease management or lifestyle behavior changes**



Behavior Change Theoretical Constructs

- **Self-efficacy expectation** – one's own capacity and confidence to control one's behavior
- **Stages of change** – cognitive and behavioral
- **Barriers** – environment, potential injury, income, access, availability
- **Benefit** – physiological and psychological



Promoting Behavior Change



- **Empowering**
- **Reducing barriers**
- **Developing skills to problem solve**
- **Shaping messages**
- **Setting small targets of change to promote long-term adherence**



Public Health Role

Practitioners must develop strategies and interventions to overcome health systems failure to successfully transmit technical skills and behavioral constructs for those with low literacy and reduced self-efficacy

