Identifying the continuum of contextual factors contributing to pain disparities: From variants of age discrimination, cultural sensitivity, and beyond

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overview

- Population growth (older adults)…why be concerned about health, disparities, and minorities?
- Defining health/(pain) disparities and inequities
- Conceptualizing social determinants of health (SDoH) and pain
- How far we've come and where we need to go…policy, research, education?

population growth

- Racial and ethnic minorities accounted for 91.7% of the nation's population growth over the past decade
- Hispanics responsible for 56% of the population growth over the past decade

-50.5 million (16.3%; 2010)

-35.3 million (2000; 43% growth over the past decade)

- Living in the US (of the total population)

-196.8 million Whites (63.7%)

-37.7 million Blacks (12.2%)

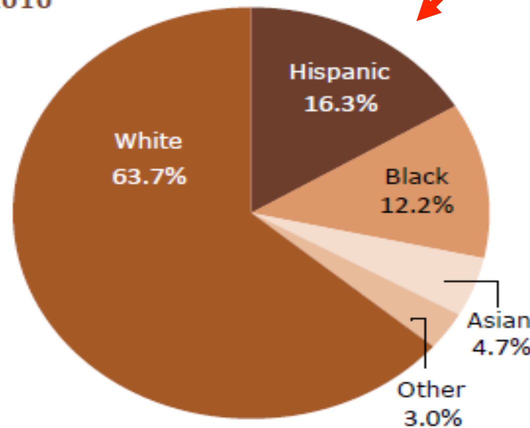
-14.5 million Asians (4.7%)

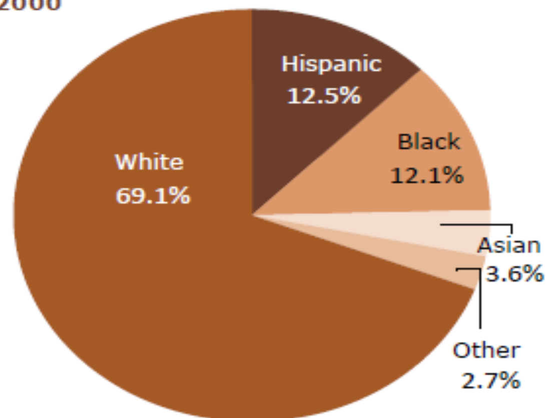
Pew Research Center; http://www.pewresearch.org/daily-number/minorities-account-for-nearly-all-u-s-population-growth; Accessed May 2014

Figure 1

U.S. Population by Race and Ethnicity, 2010 and 2000

(%)

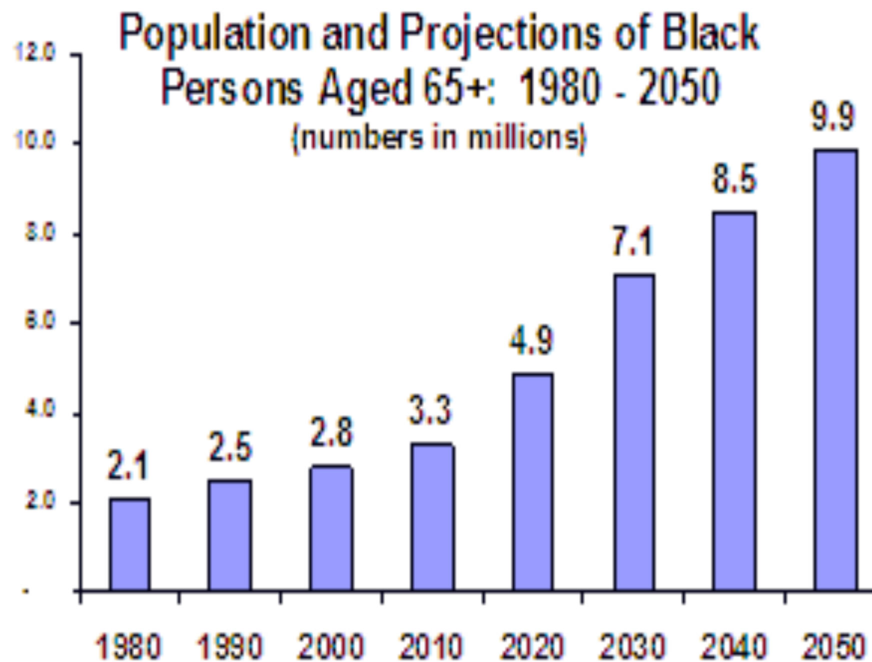




Notes: Racial groups include only non-Hispanics. Hispanics are of any race.

Source: Pew Hispanic Center tabulations of U.S. Census Bureau Redistricting_Files-PL_94-171 for states

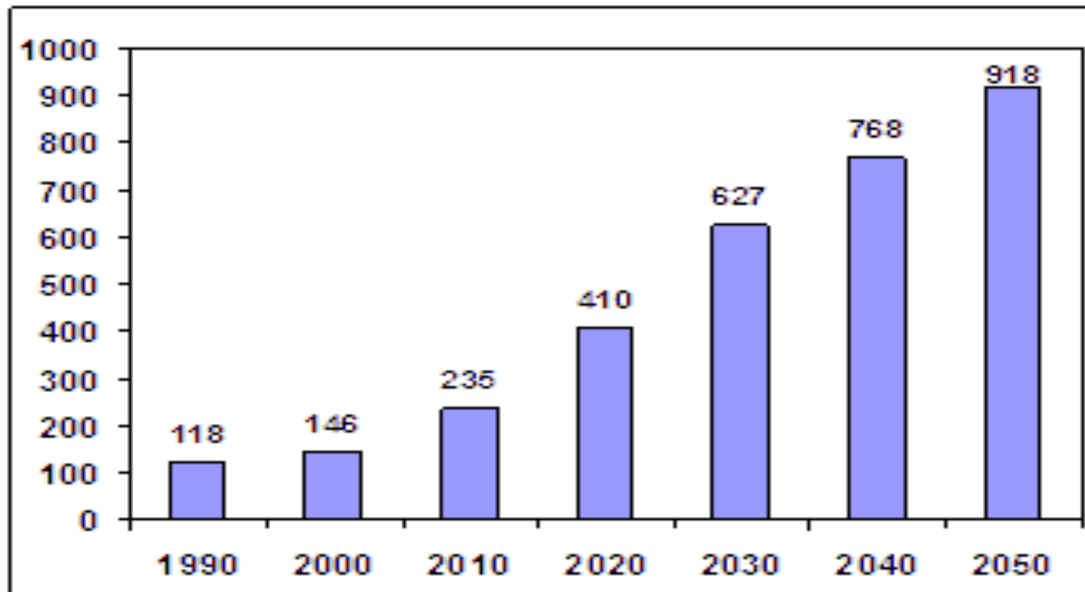
PEW HISPANIC CENTER



- The Black older population was 3.2 million in 2008 and is projected to grow to over 9.9 million by 2050. In 2008, Blacks made up 8.3 percent of the older adult population
- By 2050, Blacks 65+ will account for 11% of the older adult population

Administration on Aging,
http://www.aoa.gov/Aging_Statistics/minority_aging/Facts-on-Black-Elderly-plain_format.aspx; retrieved, May 2014

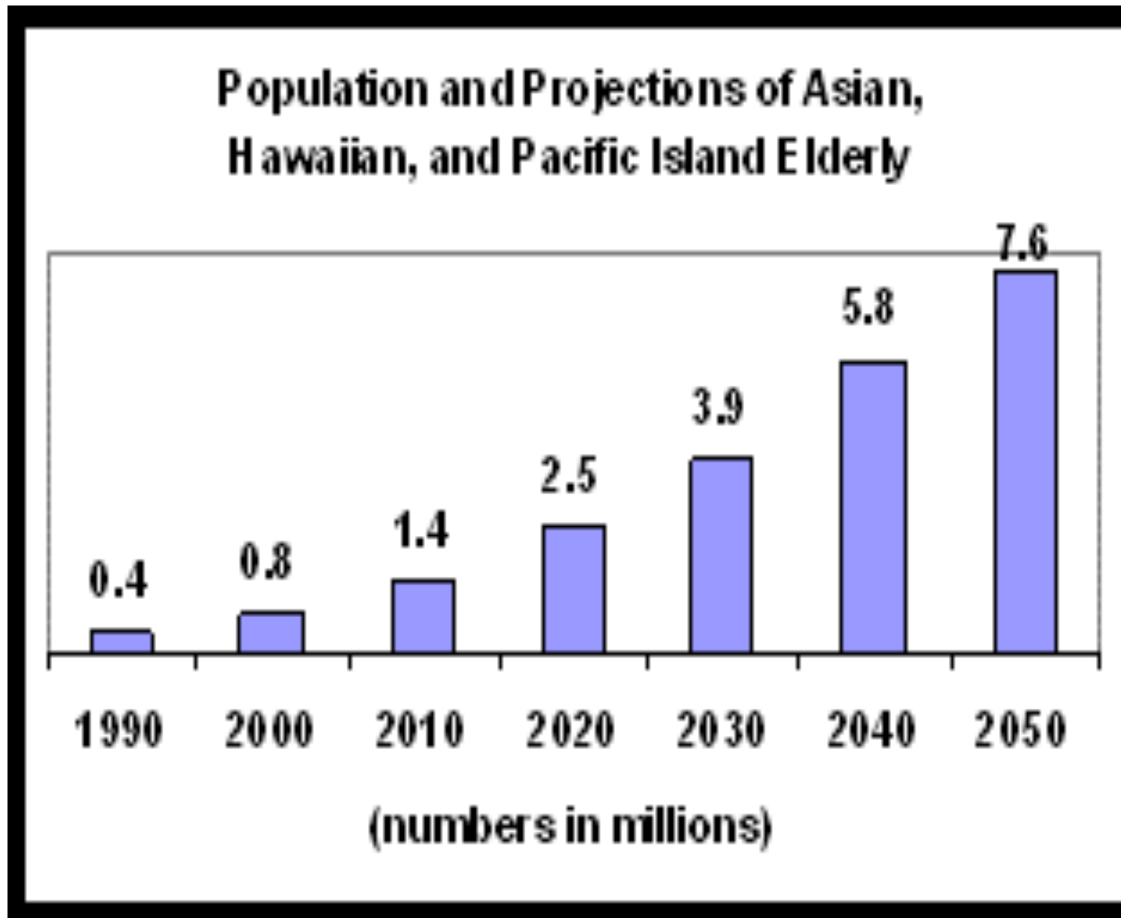
american indian and alaska native 65+



- The American Indian and Native Alaskan older population (Non-Hispanic and Hispanic) was 212,605 in 2007 and is projected to grow to almost 918,000 by 2050.

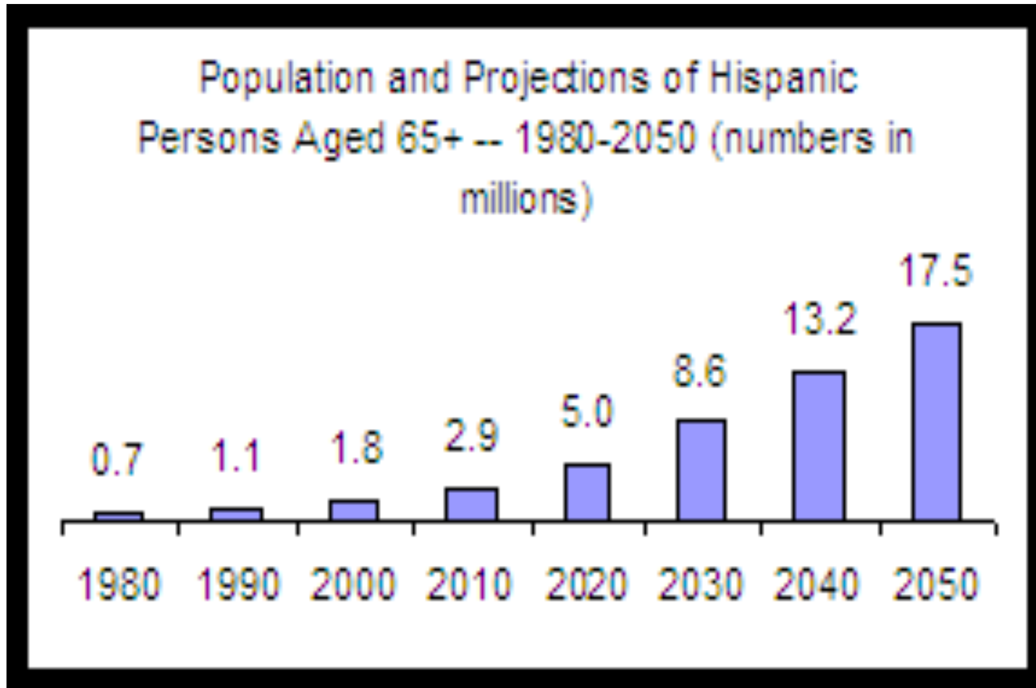
- By 2050, the percentage of the older population that is American Indian and Native Alaskan is projected to account for 1.0 percent of the older population.

Administration on Aging, http://www.aoa.gov/Aging_Statistics/minority_aging/Facts-on-Black-Elderly-plain_format.aspx; retrieved, May 2014



- The Asian, Hawaiian and Pacific Island older population was over 1.3 million in 2008 (3.4% of the older population) and is projected to account for 8.6 percent of the older population by 2050

Administration on Aging, http://www.aoa.gov/Aging_Statistics/minority_aging/Facts-on-Black-Elderly-plain_format.aspx; retrieved, May 2014



By 2019, the Hispanic population aged 65 and older is projected to be the largest racial/ethnic minority in this age group.

Administration on Aging, http://www.aoa.gov/Aging_Statistics/minority_aging/Facts-on-Black-Elderly-plain_format.aspx; retrieved, May 2014

Older minority population

What does this mean with regards to healthcare, treatment, disease management, cultural competency, etc., etc., etc.?

A profile of older Americans: 2011; AOA USDHHS

- Minority populations have increased from 5.7 million in 2000 (16.3% of elderly population) to
  - 8.1 million 2010 (20%)
  - 13.1 million 2020 (24%)

- Between 2010 and 2030 the White population 65+ is projected to increase by 59% compared to 160% for older minorities, including Hispanics (202%), Blacks (114%), American Indians, Eskimos, and Aluets (145%), and Asians and Pacific Islanders (145%)

disparity vs inequity

- dis·par·i·ty
  - a great difference. The quality or state of being different

-Merriam-Webster dictionary

- "health disparity"
  - 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 US)."

-National Institutes of Health

- "health inequity"
  - implies a state of being unfair

-Oxford Advances Learner's Dictionary

There is no agreed upon definition of health disparity

creation of social inequities… "in the beginning…"

- Differential exposure is related social positioning is reflected by racial/ ethnic group
- Social position can also be reflected on any number of characteristics that define the likelihood that an individual will experience discrimination on the basis of that social position
  - Social position determines the extent to which a person is exposed to factors that promote and/or have adverse effects on health

Burstrom et al., 2010

do the characteristics that define who I am make me disadvantaged?

VS

Patient Superhero!!

What’s being done on a national level to address (health) disparities?

National Institute on Minority Health and Health Disparities (2000)

Vision: The NIMHD envisions an America in which all populations will have an equal opportunity to live long, healthy and productive lives.

Mission: To lead scientific research to improve minority health and eliminate health disparities.

- Plans, reviews, coordinates, and evaluates all minority health and health disparities research and activities of the National Institutes of Health
- Conducts and supports research in minority health and health disparities
- Promotes and supports the training of a diverse research workforce
- Translates and disseminates research information
- Fosters innovative collaborations and partnerships

what is pain?

- A physiological response to disease and tissue damage and is often classified into different categories based on its origin:
  - Nociceptive (tissue damage or inflammation), neuropathic (nerve damage), mixed or unspecified (unknown causes or a combination of nociceptive and neuropathic)

Very subjective…what about the patient?

These categorizations do not encompass the social, environmental, and cultural factors that influence the pain experience

Certain race groups have "specific rituals about pain," and based on these rituals, members of that group learn what to expect and how to tolerate the pain experience

Farrell & Gibson, 2004; Turk & Akiko, 2002; Mularski et al., 2005

facts on pain and disparities…what do the data show?

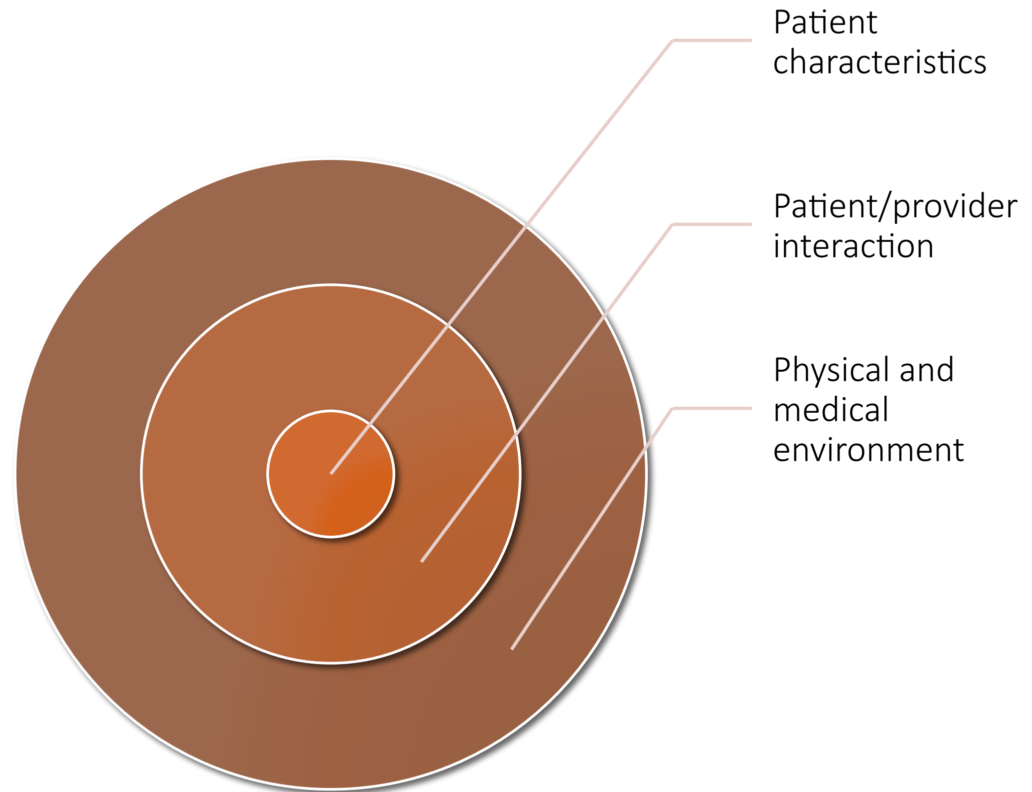
1. Pain affects ~116 million adult Americans and is the number one reason why people seek medical care
2. Pain correlates with disability, poor QoL, relational problems, lost income and productivity, and higher health care utilization
3. Direct and indirect costs of pain ~$560-635 billion annually
4. < 1% of the NIH research budget is devoted to pain and symptom management research

LaVeist et al., 2009; National Center on Minority Health and Health Disparities. Congressional Justification fiscal year. 2011; NCMHD-Director's biography; Meghani et al., 2012

cont.

5. The direct and indirect cost of overall health disparities between 2003-2006 was ~$1.24 trillion
6. The total National Institute on Minority Health and Health Disparities budget for FY 2011 devoted to health disparities research and outreach/dissemination is only $219 million
7. Total NIH budget across all NIH institutes devoted to health disparities is ~$2.8 billion

Factors contributing to disparities in pain care



Tait & Chibnall, 2014

barriers and misconceptions

Patient (elderly) related barriers	Common misconceptions	Health care professional barriers
• Reluctance to report pain or take meds • Coexisting medical conditions • Multiple medications • Multiple pain etiologies • Sensory, emotional, cognitive impairment • Fear of reporting sign of weakness • Soiocultural factors	• Personal weakness • Terminal event • Presence of serious disease (cancer) • Loss of independence • Pain attention getting device • Cannot accurately self-report • More likely to become addicted to pain medications	• Lack of documented baseline and ongoing assessment • Reliance solely on pain scales • Concern of side effects (medications) • Ineffective Staff education and evaluations • No follow through

Barkin et al., 2005

minorities and elderly (minorities) are at risk for under-treatment of pain

minorities & pain

- Minority race groups are disproportionately exposed to unrelieved pain due to inadequate medical treatment

- Racial/ethnic inequalities in pain management in the ER
  - Experience lower rates of receiving opioid analgesics during pain-related ER visits

- Minority patients have less access to pain management, receive less medication, risk of under treatment, less likely to have pain recorded

- Whites more likely to use opioids for chronic pain than Blacks

Bernabei et al., 1998; Chen et al., 2005; Green et al., 2003; Mossey, 2011; Pletcher et al., 2008

cont.

- Elderly African American and Hispanic are less likely to receive analgesic for their pain complaints than non-Hispanic Whites nursing home residents

- Those from diverse race groups are more likely to experience strain due to exposure to high levels of chronic stress often associated with unfair treatment, racism, and discrimination
  - Under these circumstances, coping resources and abilities may become reduced or depleted, making it more difficult to cope with acute or persistent pain

Bernabei et al., 1998; Chen et al., 2005; Mossey, 2011; Pletcher et al., 2008; Tait & Chibnall, 2014

“We can’t solve problems by using the same kind of thinking when we created them”

~ALBERT EINSTEIN

Is race still relevant in addressing (pain) health disparities?

race & health disparities

- It is important to study race as a social construct because of its implications for health inequities and because in the US race often structures opportunity in powerful ways. It is the lived experiences of race in America that has biological and health consequences.

- Race/ethnicity and socioeconomic status are not interchangeable and should be examined together. Although SES accounts for a large portion of health disparities, race/ethnicity is an added burden that is linked to poor health

- *A greater appreciation of the social determinants of health exists today. Research over the past 20 years makes if clear that social and economic inequalities shape many of the health disparities in the US*

How far have we come in reducing health disparities? Progress since 2000: Workshop summary; Senate health, education, labor, and pensions committee;
Brian Smedley (Director; Health Policy institute at the Joint Center for Political and Economic Studies); David Williams, Harvard University

Is there a place for SDoH in addressing pain disparities?

social determinants of health (SDoH)

- Are the conditions in which people are born, grow, live, work, and age, including the health system. These circumstances are shaped by the distribution of money, power, and resources at global, national, and local levels.

- The social determinants of health are mostly responsible for health inequities - the unfair and avoidable differences in health status seen within and between countries

- Social determinants incorporate:
  - (a) the social environment including discrimination, income, and gender;
  - (b) the physical environment including where persons live;
  - (c) health services including access to quality care and health insurance
  - (d) structural and societal factors

Doornbos et al., 2013; USDHHS, 2010; CDC, 2012

association between SDoH and health disparities

When disparities are discussed, much of the attention in the past has focused on how disparities in the way in which patients are treated and managed care be reduced or eliminated.

Focus needs to be on the root causes of health disparities, including the living and working conditions in communities where people live

How far have we come in reducing health disparities? Progress since 2000: Workshop summary; Senate health, education, labor, and pensions committee

societal risks & contextual factors

- Health practices
- Availability and acceptability of resources
- Neighborhood residential quality
- Discrimination/racism
- Perceptions and experiences (life span)
- Communication
- Symptom presentation

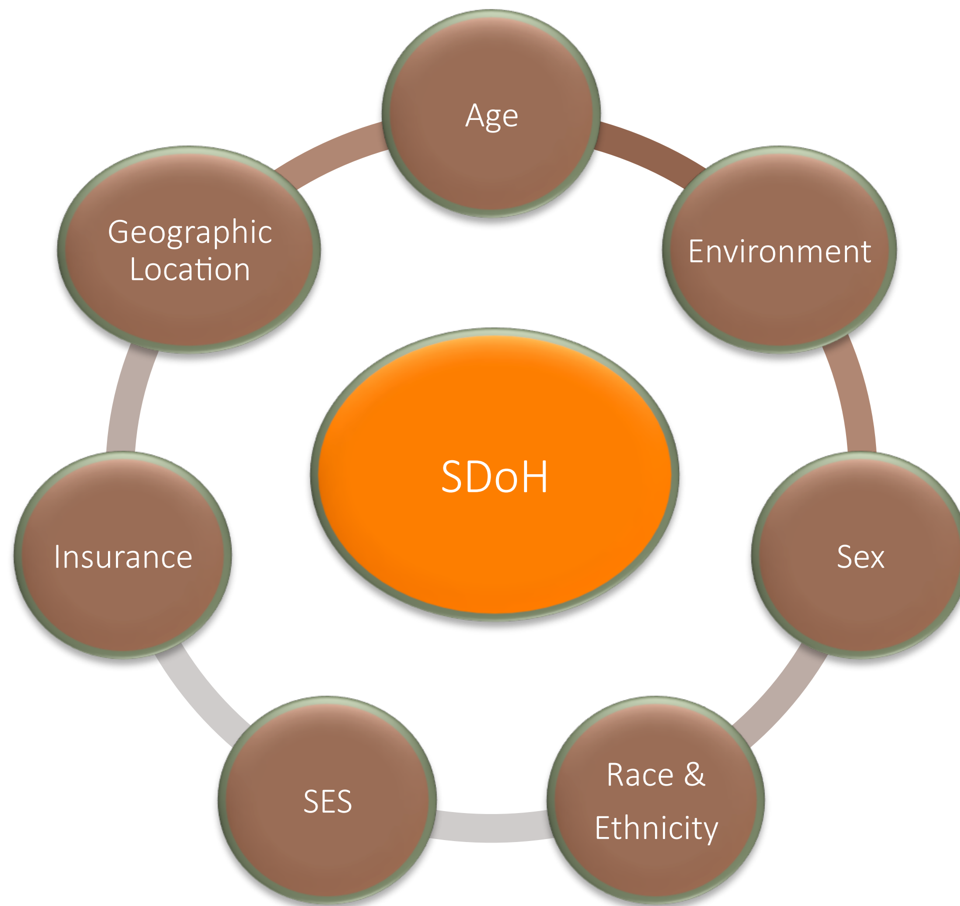
❖ Health is embedded in larger historical, geographic, sociocultural, economic, and political contexts

- **strength and resilience**
- **discrimination**
- **social disadvantage**

❖ Thus, health should be understood not only based on individual characteristics, but societal events (across the lifespan)

❖ To understand the relationship between race and pain, the historical context of race and health should be considered first

Williams, 2005



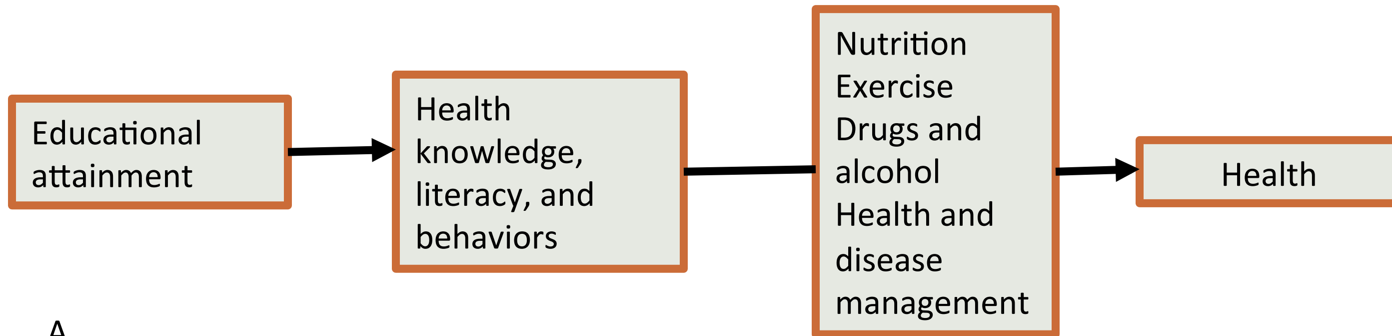
Prevention, early detection,

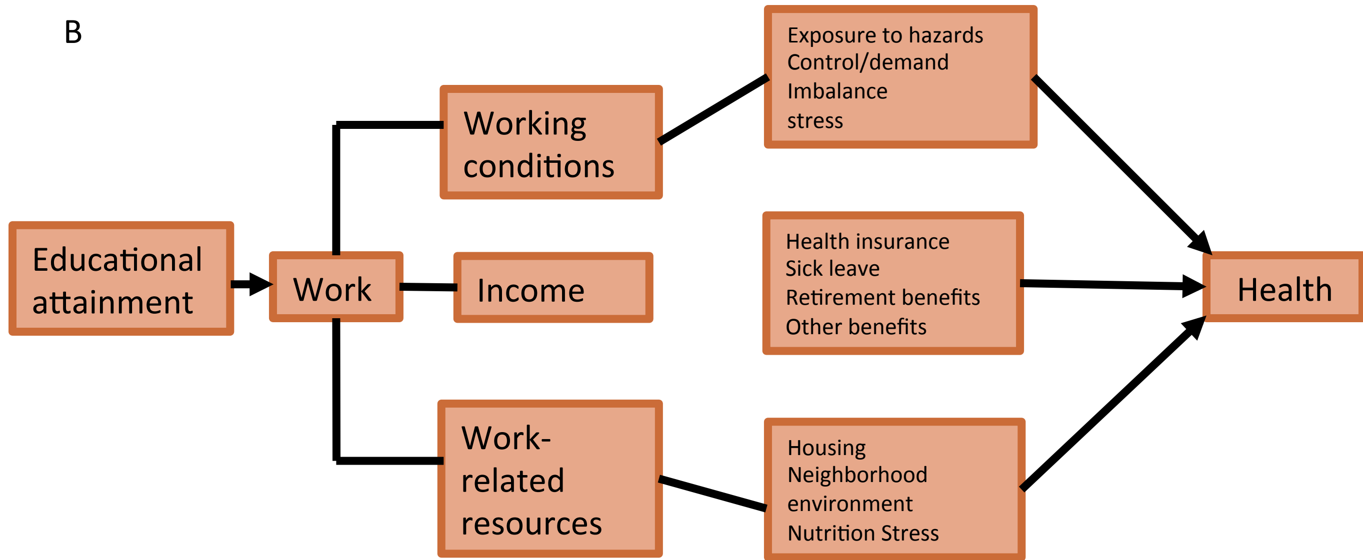
diagnosis/incidence,

treatment,
posttreatment QOL,

survival,
and mortality

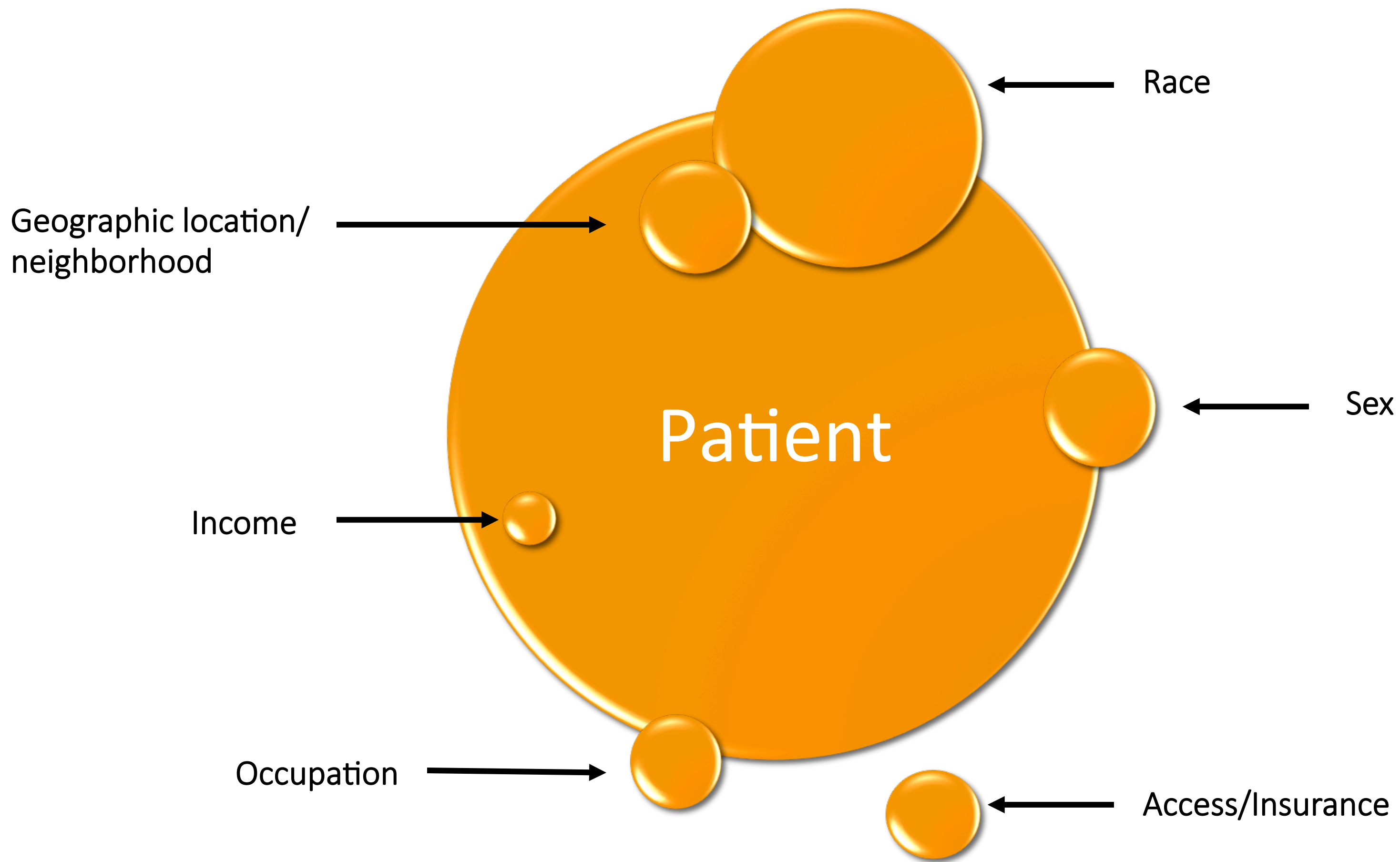
National Cancer Institute. Accessed September 8, 2010



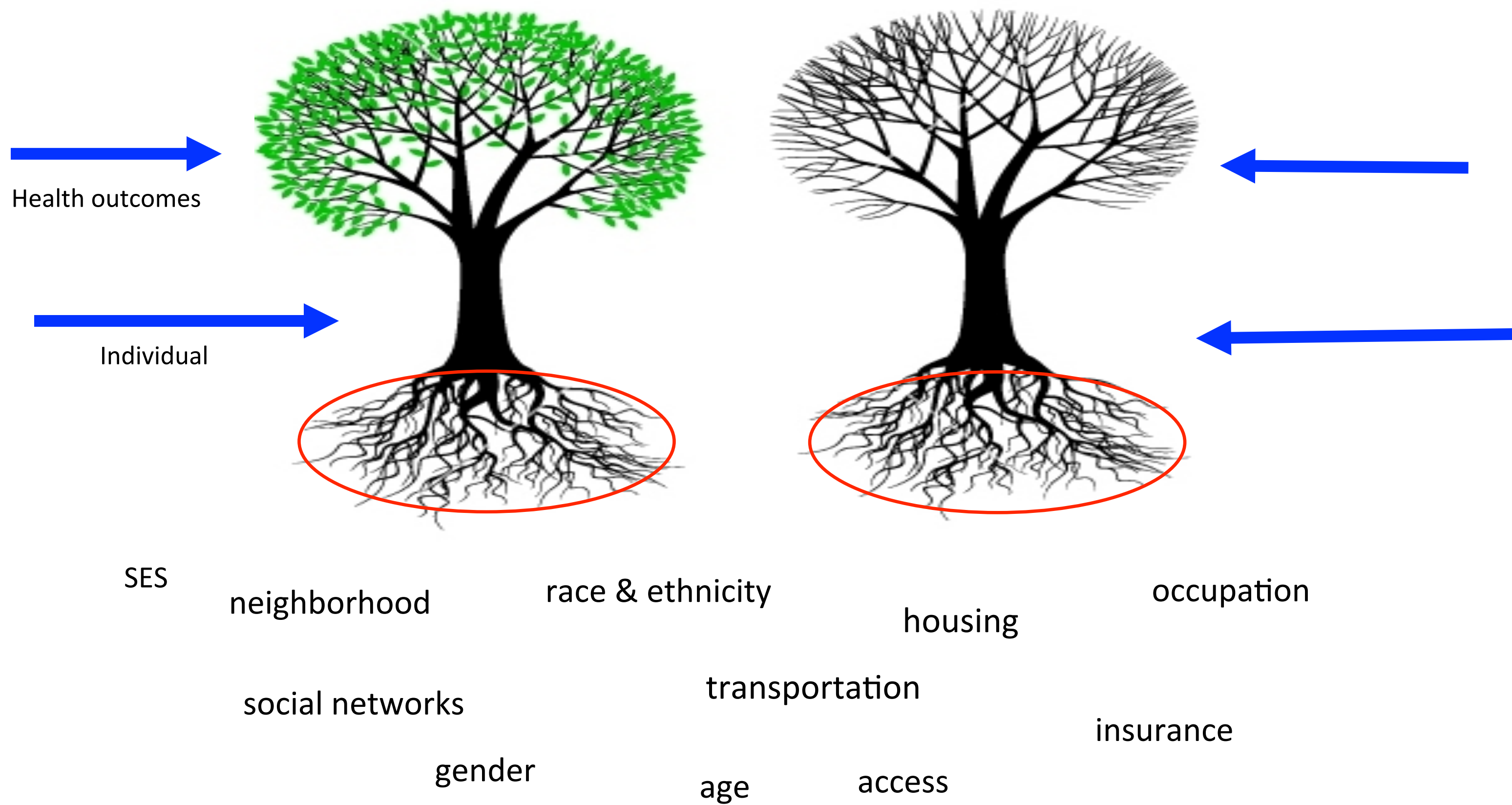


Braveman, Egerter, & Williams, 2011

influence of SDoH should look more like this…



disparities…getting at the "root of the cause"



agenda for eliminating pain disparities

...the start of best practices

Cultural competence/sensitivity and assessment of health

- What do you call this problem?
- What do you believe is the cause of this problem?
- What course do you expect it to take?
- How serious is it?
- What do you think this problem does inside your body?
- How does it affect your body and your mind?
- What do you most fear about this condition?
- What do you most fear about this treatment?

elements of cultural competence...what works?

1. What works, when and how?
2. Little research on what makes for an effective training in cultural competence, training should be standardized
3. Importance of community engagement in the provision of culturally competent care
4. Complexity of measuring cultural competence

continuum of diversity awareness/cultural sensitivity/competence

Adapted from Coggins, PC, Multicultural Education Institute, 2009

structural/system factors …recommendations for change

- Federal agencies should invest in broad public education and primary prevention programs aiming at pain care disparities
- Accreditation organizations must promote standards for the effective use of language and interpreter services; providers may not be trained to use interpreters effectively for optimal communication
- Providers/health care entities should develop an easy-to-navigate system to assist in the use of patient assistance program to obtaining medications
- Uniform reimbursement models are needed for language and translation services that improve equity in access; promote standards for effective use of language and interpreter services

Meghani et al., 2012

indirect ACA provisions…pain care disparities

1. Train primary care physicians in cultural competence
2. develop and evaluate models of cultural curricula
3. support collaborative research on topics including cultural competence
4. require population surveys to collect and report data on race, ethnicity, and primary language
5. establish Patient-Centered Outcomes Research Institute to examine health disparities
6. incentivize payments for reducing health care disparities
7. standardize drug labeling, including risks and benefits

Meghani et al., 2012

research-related factors ...recommendations for change

1. Need for federal infrastructure for conduct pain disparities research
2. Consistency in race/ethnicity data collection…what racial and ethnic categories should be collected and how these variable should be collected
3. Improve funding mechanisms to increase research training in pain care disparities, with support for pre-and post-doctoral trainees and junior investigators
4. Existing national longitudinal health surveys should routinely include questions related to pain care access, utilization, and outcomes
5. Need to capture appropriate populations that are more likely to experience pain care disparities (e.g., areas servicing minorities and underserved)

How far have we come in reducing health disparities? Progress since 2000: Workshop summary; Senate health, education, labor, and pensions committee; Meghani et al., 2012

research cont.

6. More measurement work is needed in interpreting pathways by which different social factors contribute to the creation of health disparities, which may provide a better understanding of how they operate and exacerbate health disparities

7. It's best to focus on multiple factors, such as health literacy, access to health care or the patient-centered home, etc. in assessing health outcomes, and not as a single factor
   - When considering health of those from diverse race and ethnic populations, researchers need to look at all of these indicators
     - This is not your traditional bench research approach in which, (ideally) one variable is changed and all others are controlled for.

How far have we come in reducing health disparities? Progress since 2000: Workshop summary; Senate health, education, labor, and pensions committee; Meghani et al., 2012

advocacy & policy

- Develop an alternative framework for understanding and addressing disparities
- Educational campaigns for stakeholders and providers
- Develop educational programs to focus on effective pain management and use of opioids in pain treatment
- A pain disparities agenda should be implemented in the missions of leading pain advocacy organizations
- Increasing the diversity of providers, program administrators
- Educating professionals about diversity and pain management
- More participation of diverse race groups in research (intervention studies)
- Understanding aging and diversity, and increased research and education on minority aging

Green et al., 2003; Meghani et al., 2012

Although the road seems
long…we WILL eventually
get there!

...resources

- *Unnatural Causes: Is Inequality Making Us Sick?* (www.unnaturalcauses.org*)*
- Relieving pain in America: A blueprint for transforming prevention, care, education, and research. Committee on advancing pain research, are, and education; Institute of Medicine. (2011). The National Academies Press, Washington, DC
- How far have we come in reducing health disparities?: Progress since 2000: Workshop summary.
- S.H. Meghani et al., (2012). Advancing a national agenda to eliminate disparities in pain care: Directions for health policy, education, practice, and research. *Pain Medicine, 13*, 5-28.
- Tait, R.C., & Chibnall, J.T. (2014). Racial/ethnic disparities in the assessment and treatment of pain. *American Psychologist, 69*(2), 131-141.