

Health Disparities Experienced by People with Disabilities

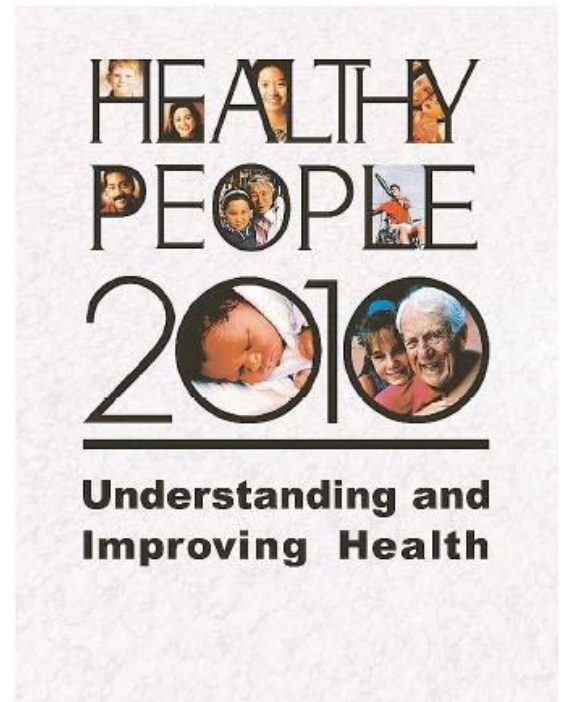
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Healthy People 2010

- Two main Goals of Healthy People 2010:
 - 1) increase quality and quantity of healthy life
 - 2) eliminate health disparities.



Health Disparities

- Preventable, population-specific differences in the presence of disease, quality of health care or access to health care (Health Resources and Services Administration, 2000).
- Groups of Americans have been identified in the literature as receiving disparate health care.
 - ethnic minorities, women, children, the elderly, **people with disabilities**, the poor, prisoners, gays and lesbians and transgendered populations (Dyke & White, 2009).

Misconception

- Misconception – all people with disabilities have poor health (US Department of Health and Human Services, 2002; Healthy People 2010)
- The World Health Organization’s *International Classification of Functioning (ICF)*
 - “defines health and disability as separate constructs, such that a person with a disability can be healthy or unhealthy, just as a person without a disability” (Reichard, Stolze, & Fox, 2011, p. 60).



Health Disparities and People with Disabilities

- People with disabilities are:
 - More likely to have chronic diseases and secondary conditions
 - More likely to have a lower quality of care
 - More likely to experience barriers to health care services



Chronic Disease and Secondary Conditions

- People with disabilities are more likely to have chronic disease and secondary conditions:
 - Cardiovascular Disease
 - Diabetes
 - Asthma
 - High Blood Pressure
 - Arthritis
 - Cancer

Quality of Care

- Women with mobility disabilities are significantly less likely to:
 - receive Pap test,
 - a breast exam or
 - a mammogram (Diab & Johnson, 2004; Iezzoni, et al, 2000; Armour, Thierry, and Wolf, 2009)
 - Women with lower extremity disabilities had: OR of 0.60 (0.4-0.9) for Pap and 0.70 (0.5-0.9) for mammogram (Iezzoni, et al, 2001)
 - be given information about birth control or questioned about sexual activity

Quality of Care

- Disabled people are significantly less likely to:
 - Be questioned about tobacco, alcohol, cocaine, marijuana or other drug use (Iezzoni et al, 2000),
 - to engage in physical exercise,
 - to see a dentist or have their teeth cleaned, (Haverkamp et al, 2004)
 - to have had their height / weight checked,
 - to have their cholesterol checked,
 - to have had a tetanus shot
 - (Iezzoni et al, 2000)



Quality of Care

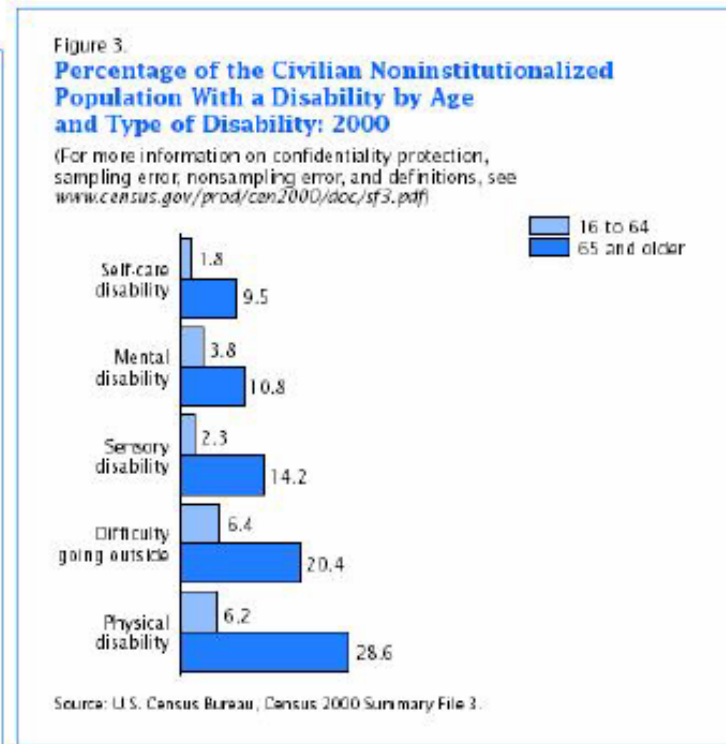
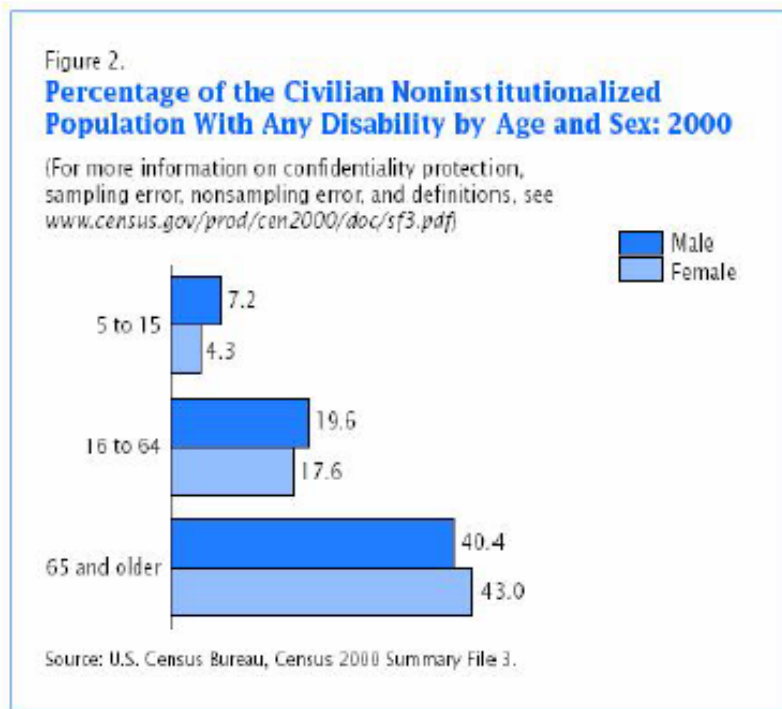
- Additionally, people with disabilities are:
 - More likely to rate their health as poor
 - More likely to be overweight or obese
 - Have a higher OR for dissatisfaction with the quality of their health care (Iezzoni, Davis, Soukup, et al, 2002)
 - More likely to delay health care due to cost (Chevarley, Thierry, Gill, et al, 2006)

Significance for Nevada

- In Nevada, 12.9 percent of the non-institutionalized adult population reported having a disability in 2006 (Brault, 2008).
- This percentage is expected to increase as the baby boomers age.
- The number of people in American who are 65 years or older is expected to increase by 36% between 2010 and 2020 (Colello, 2007).

Number of Americans with Disabilities

- In 2011, the first Baby Boomers will reach age 65.
- The median age in America is anticipated in peak in 2035 (Day, 2010).



Purpose of Studies

- To use BRFSS data from 2008 and 2009 to compare engagement in health risk behaviors and preventive health services and presents of chronic disease of Nevadans with and without disabilities.

Behavior Risk Factor Surveillance System (BRFSS)

- BRFSS
 - National, cross-sectional
 - Annual, random-digit dialing telephone survey
 - adults 18 years or older who are not institutionalized
- In 2001, two disability questions became part of the core components of the BRFSS questionnaire
 - Q#1 “are you limited in any way in any activities because of physical, mental or emotional problems?”
 - Q#2 “do you now have any health problem that requires you to use special equipment such as a cane, a wheelchair, a special bed or a special telephone?” (BRFSS, 2008)

Methods

- Use SAS 9.2 to calculate:
 - Descriptive statistics comparing those with and without disabilities included: age, income, race, access, education and gender
 - Differences were determined using Rao chi square
 - Proc SurveyFreg
 - Logistic regression was utilized to calculate crude and adjusted odds ratios for health risk behaviors, preventive care, chronic diseases
 - Proc SurveyLogistic
- Participants who answered 'yes' to both disabilities questions were compared to those who answered 'no'.

Results

- Descriptive Statistics
 - People with Disabilities were more likely to be:
 - In the lower income bracket
 - In the older age bracket

Results

- Covariates used for Multiple Logistic Regression: age, income, education, gender, race, access to health insurance

Table 2: Chronic Disease and Secondary Conditions - People with Disabilities compared to People without Disabilities in Nevada 2009

Variable	Adjusted OR	Adjusted 95% CI
Diabetic	3.01	1.90-4.75*
CAD	1.89	1.17-3.06*
Stroke	3.66	2.29-5.86*
Asthma	3.41	1.81-6.46*
Cancer	2.17	1.32-3.55*
High Blood Pressure	6.53	3.72-11.47*
High Cholesterol	2.44	1.51-3.93*

* = significant finding

Results

Table 3: Risk Factors - People with Disabilities Compared to People without Disabilities in Nevada - 2009

Variable	Adjusted OR	Adjusted 95% CI
Smoker	0.99	0.62-1.56
Binge Drinker	0.91	0.53-1.54
Physically Inactive	3.01	1.90-4.75*
Fruit /Vegetable Consumption	1.02	0.64-1.61
Over Weight/Obese	1.88	1.14-3.10*

* = significant finding

Results

Table 3: Preventative Health Services - People with Disabilities Compared to People without Disabilities, Nevada 2008

Variable	Adjusted OR	Adjusted 95% CI
Dental Cleaning	0.66*	0.46 - 0.99
Pneumonia Vaccine	4.62*	3.19 - 6.68
Flu Vaccine	1.58*	1.07 - 2.35
HIV Test Ever	0.95	0.59 - 1.53
Mammogram Ever	3.96*	2.05 - 7.66
Mammogram Past Two Years	1.25	0.73 - 2.14
PAP Ever	1.10	0.40 - 3.03
Pap Past Three Years	0.48*	0.29 - 0.81
PSA Ever	2.75*	1.27 - 5.96
PSA Past Two Years	2.56	0.99 - 6.60
Digital Rectal Exam Ever	1.63	0.77 - 3.40
Digital Rectal Exam Past 2 Year	1.10	0.56 - 2.19

Discussion

- Healthy People 2010
- Chapter 6, Disability and Secondary Conditions:
 - “For people with disabilities to have the opportunity for healthy lives, both physically and emotionally, programs and facilities that offer wellness and treatment services must be **fully accessible**” (Health People, 2010)

Healthy People 2020

- *New objectives*
 - “reduce the proportion of people with disabilities reporting delays in receiving primary and periodic preventive care due to specific barriers” (Healthy People 2020, 2009).

Discussion

- Fitness facilities lack accessibility for people with disabilities (Rimmer, Riley, Wang, et al., 2005).
- Common barriers:
 - lack of adaptive and/or accessible equipment
 - fitness professionals not having knowledge about disabilities and adapting programs
 - lack of policies regarding people with disabilities
 - negative attitude of fitness staff (Rimmer, Riley, Wang, et al., 2005).



Discussion

- When adapted programs are available, studies show:
 - Increased physical activity
 - Reduction in obesity among people with disabilities
(Kilmer, Wright, Aitkens, 2005; Olney, Nymark, Brouwer, et al., 2006; Rimmer, Rauworth, Wang, et al., 2009)



Barrier Encountered by People with Disabilities

- Qualitative studies with people with disabilities have identified three major categories of barriers (Drainoni et al. 2006) :
 - Personal – Cultural
 - Financial
 - Structural
 - Built environment / Office
 - Equipment

Barriers to Accessing Health Care

- Personal - Cultural

- physician's insufficient disability specific knowledge
- misconceptions about people with disabilities
- insensitivity and disrespect from physicians, nurses and staff;
- a failure to take patients or caregivers seriously
- a reluctance or unwillingness to provide care by both physicians and dentists (Drainoni, Lee-Hood, Tobias et al., 2006)

Barriers to Accessing Health Care

- Financial Barriers
 - lack of coverage,
 - lack of insurance and/or high co-pays that made provider care and services, medication and durable medical equipment too expensive

Barriers to Access

- Structural barriers that people with disabilities experience
 - *inadequate disability parking,*
 - *lack of ramps / ramps that are too steep,*
 - *narrow doorways,*
 - *cramped waiting and examination rooms*
 - *lack of height adjustable exam tables*
 - *weight scales that could accommodate wheelchairs*
 - *inaccessible diagnostic equipment* (Kroll et al, 2006; Scheer et al, 2003)



Public Health Professionals

- Have policies to address accommodations for people with disabilities
- Check for ADA compliance
 - ADA Checklist for Existing Facilities.
http://adaptiveenvironments.org/neada/site/pub_307
 - Access to Medical Care for Individuals with Mobility Disabilities.
http://www.ada.gov/medcare_mobility_ta/medcare_ta.pdf
- Provide training for staff

Future Research

- Why do barriers exist that limit access to preventive services for people with disabilities?
 - Lack of Knowledge about the ADA?
 - Cost of modification or accessible equipment?
 - Enforcement of the ADA?
- Strive for full accessibility in all health and wellness facilities.

- Questions / Thoughts