“Race” is a commonly used term that has no universally agreed upon definition. Some definitions are biologic, while others are political and/or social; many are controversial. “Race” and “Ethnicity” are often combined, confused, and/or used interchangeably. Although there is overlap between the two, they are not synonymous.

Based on self-identification, the US Census Bureau (2000) lists the most common racial groups in the United States as:

- White (75.1%)
- Black or African American (12.3%)
- Asian American (3.6%)
- American Indian or Alaska Native (.9%)
- Native Hawaiian/Other Pacific Islander (.1%)

Common US Census Bureau (2000) ethnic groups or sub-groups include: Hispanic or Latino/Latina, Asian, Black or African American, European American, Middle Eastern, and White American. Based on self-identification, the US Census Bureau (2000) reports that 12.5% of the US population is Hispanic or Latino and that 87.5% is Not Hispanic or Latino.

Epidemiologic studies have found that members of minority racial and ethnic groups are at disproportionate risk of TBI (Bazarian et al., 2005). Race- and ethnicity-based disparities in health care are well documented (e.g., Selassie et al., 2004). These disparities have resulted in poorer minority race and ethnicity rehabilitation outcomes (e.g., Neville, 2000).

Research has begun identifying other race- and ethnicity-related factors that influence TBI outcomes. We will present some of this research in the following areas: views of disability, caregiver patterns, and employment, along with service delivery implications regarding each.

**Views of Disability**

As defined by the World Health Organization’s International Classification of Functioning, Disability, and Health, a disability is a “restriction or lack of ability to perform an activity in the manner or within the range considered normal or acceptable for a human being” (2001).

Research suggests that views of disability appear to be influenced more by geographic, ethnic, and/or cultural factors than by race and that these factors are associated with specific beliefs, attitudes, and behaviors around a particular disability that may affect one’s likelihood of participating in treatment and perceiving it as helpful. We will discuss Asian (Parette & Huer, 2008), Black or African American (Fields, 2001), Hispanic or Latino/Latina (Gifford & Carcieri, 2008), and White American (Wright et al., 2002) ethnic views on disability.
Service delivery implications of ethnic views on disability include the following:
1. Know you and your patients’ and families’ race(s) and ethnicity(ies);
2. Don’t make stereotypic assumptions based on race and/or ethnicity; ask your patients and families how they view disability, TBI;
3. Educate patients and families about available race- and/or ethnic-based services and supports.

Caregiver Patterns
It is well documented that TBI causes significant caregiver stress. Very few studies have investigated racial and/or ethnic similarities and differences in caregiving following TBI. We will present findings of two such recent prospective, observational studies (Hart et al., 2007; Sander et al., 2007):
1. In a study of 195 white and 61 African American caregivers of moderate to severe TBI adult survivors (1 to 5 years post-injury), the majority of caregivers in both groups were parents. More white than African American caregivers included spouses, and more African American than white caregivers included “other relatives” ($p < .01$). African American caregivers spent more time caring for TBI survivors than white caregivers ($p < .001$) and reported more depressive symptoms ($p < .002$). Both African American and white caregivers most frequently turned to Houses of Worship for support ($p > .05$). White caregivers used professional services for support ($p < .05$) and attended support groups more than African Americans ($p < .02$) (Hart et al., 2007).  
2. In a study of 195 caregivers (75% white and 25% black or Hispanic) of mild/moderate (33%) and severe (67%) TBI adult survivors (1 year post-injury), the majority of caregivers in both groups were parents. More black and Hispanic than white caregivers included “other relatives” ($p < .01$). Black and Hispanic caregivers used emotion-focused distancing and accepting responsibility coping strategies more than white caregivers ($p < .05$). Black and Hispanic caregivers had more traditional beliefs regarding the caregiver role than white caregivers, and traditional beliefs regarding caregiving were associated with increased distress ($p < .01$) (Sander et al., 2007).

Service Delivery Implications of these findings include:
1. Ask caregivers about their emotional well being and supports that they use;
2. Educate caregivers about viable service and support options;
3. Know that there may be racial, ethnic, cultural, personal, and/or other reasons why individuals utilize/do not utilize available services and supports.

Employment
Employment is one of the most important predictors of well-being, quality of life, social integration, and recovery in TBI (Wehman et al., 2005). Few studies have investigated racial and/or ethnic similarities and differences in employment following TBI. We will present findings of recent observational studies (Arango et al., in press; Cardoso et al., 2007):
1. Results of a logistic regression analysis of secondary data of 3,468 white and 1,791 ethnic minority individuals with TBI (1 year post-injury) revealed that the odds of ethnic minorities being unemployed were twice as great as the odds of whites being unemployed after adjusting for socio-demographic, injury, and rehabilitation characteristics. There were no occupational status differences between the two groups ($p > .05$) (Arango et al., in press);
2. Results of a logistic regression analysis of secondary data of 437 Hispanic or Latino and 5,394 European American TBI adult survivors (injury severity and time post-injury not reported) revealed that job placement and on-the-job support services significantly improved employment outcomes and that European American survivors were more likely to receive on-the-job support services than Hispanic survivors ($p < .05$), after adjusting for socio-demographic, injury, and
rehabilitation characteristics. Hispanic survivors were more likely to receive vocational training, transportation, and maintenance services ($p < .05$), presumably because Hispanics had more basic service needs than European Americans (Cardoso et al. 2007).

Service Delivery Implications of these findings include:
1. Incorporate patient-specific work-related goals and activities into therapy;
2. Explore the feasibility of patient volunteer work;
3. Advocate for vocational rehabilitation services, including on-the-job support.

For more information regarding this presentation, please contact:
Therese M. O’Neil-Pirozzi, ScD, CCC-SLP
Associate Professor, Northeastern University
Speech-Language Pathology & Audiology
103 Forsyth Building
Boston, MA 02115
Phone: 617-373-5750
Email: t.oneil-pirozzi@neu.edu

References:


Neville HA. Psychological adaptation among racial and ethnic minority individuals following spinal cord injury: A proposed culturally inclusive ecological model. Rehabilitation Psychology, 45, 89-100, 2000.


