Measure of Race, Ethnicity and Culture:

Population Science isn’t science unless you know the population

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What is missing in the Science of Health Disparities?

Far better an approximate answer to the right question, which is often vague, than an exact answer to the wrong questions, which can always be made precise.

Research and Practice
Focus

- The gap in health outcomes and mortality among various cultural groups in the U.S. and Euro-Americans is significant and growing.

- Numerous studies targeting ethnic populations have had limited effect in either reaching diverse populations and/or effecting significant change in outcomes.
Lack of scholarship to study population differences

<table>
<thead>
<tr>
<th></th>
<th>Lack of <strong>precision</strong> in operationalizing population groups by “race”, “ethnicity” or ‘culture’ that would be unacceptable with any other variable used in scientific inquiry.</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Is culture genetic or behavioral?</td>
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Categorical use of:

1. Non-Hispanic White
2. Hispanic (ethnicity in 2000 Census)
   (34 countries)
3. American Indian/Alaska Native (>600)
4. Asian American (37 groups)
5. Pacific Islander (20+ groups)
6. African American/Black (>5 groups & regional differences)

>100 languages
Adapted from APIAHF: Diverse Communities, Diverse Experiences: The Status of Asian Americans and Pacific Islanders in the U.S. (A Review of Six Economic Indicators and Their Impact on Health), 2005
U.S. Poverty Rates, 2000

% U.S. Totals by Race/Ethnicity\(^1\), and Selected Asian Populations\(^2,3\)

2000 Poverty Threshold

Family of 4 w/2 children = $17,463
Family of 4 w/3 children = $17,524
Individual living alone <65 yrs = $8,959
Individual living alone ≥65 yrs = $8,259

2. Asian & Pacific Islander American Health Forum: API Center for Census Information and Services;
Age-Adjusted Death Rates for Stroke:

CA 1990

Other Islander
Samcan
Guamanian
Hawaiian
Other Asian
Asian Indian
Filipino
Laotian
Thai
Cambodian
Vietnamese
Korean
Japanese
Chinese
Other Hispanic
Cuban
Puerto Rican
Mexican
Native American
Black
White
Age-Adjusted Death Rates for Coronary Heart Disease, CA 1990

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>White</th>
<th>Black</th>
<th>Native American</th>
<th>Mexican</th>
<th>Puerto Rican</th>
<th>Cuban</th>
<th>Other Hispanic</th>
<th>Chinese</th>
<th>Japanese</th>
<th>Korean</th>
<th>Vietnamese</th>
<th>Cambodian</th>
<th>Thai</th>
<th>Laotian</th>
<th>Filipino</th>
<th>Asian Indian</th>
<th>Other Asian</th>
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<th>Guamanian</th>
<th>Samoan</th>
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Where we are:
Assumptions made from cultural particulars....
Limitations of Current use of Race, Ethnicity and Culture

- Methodologic Issues — validity and ability for interpretation:
  - Conceptual
  - Methodologic
    1. Operationalization
    2. Measurement
    3. Equivalence
Limitations, con’t

Data quality
  - Validity
  - Lack of consensus on its use - uniformity
  - Variability in the terminology
  - Misclassification
  - Lack of reliability - especially over time
  - Mutually exclusive categories

CDC National Electronic Telecommunications system for surveillance 1994-1997 (MMWR, 1999)
  - 52% to 55% of records had completed information on race and ethnicity
  - 98% age
  - 95% to 99% for sex
Give rationale for using race, ethnicity or both

Define how they measured the variables

Describe how race and/or ethnicity was attributed
  - Self identification is preferred
  - Designate whether options were available and closed or open
    - If Closed, provide options
    - If categories combined, explain
    - Process of categorization of pen-ended options should be made transparent
Key Definitions

§ **Race** – MYTH scientifically – assumed that phenotype predicts genotype

§ **Culture** – *system* of beliefs, values, lifestyles, ecologic and technical resources and constraints

§ **Ethnicity** – one’s sense of identity as a member of a cultural group within a power structure of a multicultural society & identified so by others based upon socio-historical context

§ **Racism** – assertion of power; ego fulfillment & status at expense of others by skin color
Culture

- Environment
- Economy
- Technology
- Religion/World View
- Language
- Social Structure
- Beliefs and Values
Ecological Model of Health

* Modified from McElroy and Townsend, 1996.
Scientific Validity

Concepts of Culture as Variable

- Dichotomous
- Unidimensional
- Monolithic
- Static

- Continuous
- Multidimensional
- Heterogeneous
- Dynamic
Major Assumption in Acculturation

- Acculturating to “mainstream” lifestyles will promote health

Based on:

- “Behavior/Lifestyle” model that assumes culturally based knowledge, attitudes and beliefs cause people to make health care choices resulting in observed health patterns.
Acculturation

**Usual measures**
- Place of birth
- Language
- Time in the U.S.

- These will measure new immigrants, but what about ethnic enclaves like Little Italy in NY or South Central in Los Angeles or the Southside in Chicago or Tex-Mex Laredo in Texas

**Alternative** – familiarity in ability to navigate the health care system

- Do not need to give up culture to use Taiwan – no appointments for medical visits
- Socialized medicine - do not need to pay
Health Acculturation Navigation Skills

- Emphasizing structural rather than cultural barriers to health care utilization
  - Health care literacy
  - Insurance
  - Geography
  - Differential Care

- Identifying specific cultural barriers with a clearer and more holistic definition of culture
Cultural Sensitivity

All Phases of the Research Process

- Planning
- Theory Development
- Instrumentation
- Analysis
- Interpretation

Rogler, 1989
Symbols are Symbols Only By Convention

- No Natural connection
- Arbitrary
- Vary from one culture to another

Challenge the assumption of UNIVERSALITY
<table>
<thead>
<tr>
<th>Innate Predisposition</th>
<th>Evil (mutable or immutable)</th>
<th>Neither good nor bad mutable or immutable</th>
<th>Good (mutable or immutable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Man’s Relation to Nature</td>
<td>Man Subjugated to Nature</td>
<td>Man in Nature</td>
<td>Man Over Nature</td>
</tr>
<tr>
<td>Time Dimension</td>
<td>Past</td>
<td>Present</td>
<td>Future</td>
</tr>
<tr>
<td>Valued Personality Type</td>
<td>Being</td>
<td>Being-in-Becoming</td>
<td>Doing</td>
</tr>
<tr>
<td>Modality of Relationship</td>
<td>Lineal</td>
<td>Collateral</td>
<td>Individualistic</td>
</tr>
</tbody>
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Kluckhohn & Strodbeck, 1966 (in Brink)
Culture Based Assessment

Cultural Element Approach -
- Static
- Stereotypical

Cultural Perspective
- Systems approach
- Variations of principles within the social context of the individual and the group
Cultural Variability

1. Individualism - Collectivism

2. High-and low-context communication

3. Masculine – Feminine
“Well, they look pretty undocumented to me.”

New Yorker / LA Times June 2007

This cartoon in the New Yorker shows the illustrator’s take on an enduring political issue. In addition to his cartoons, Handelsman created five covers for the magazine and illustrated several books.
<table>
<thead>
<tr>
<th>“White” Population</th>
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<tbody>
<tr>
<td>Scotland</td>
</tr>
<tr>
<td>Ireland</td>
</tr>
<tr>
<td>Iraq</td>
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</tbody>
</table>
Door at polling place at Maclay Junior High School in Pacoima has messages for voters in several languages.
Elder’s Attitude Towards Patient Autonomy

Blackhall, et al
Goal

Increase the **scientific** study of cultural differences to identify mutable points of intervention in order to modify or promote behaviors
How do we improve the science to study diverse populations?

1. Develop guidelines to operationalize the terms:
   - culture
   - ethnicity
   - race or the effects of racialized care

2. Currently no standards because of lack of attention:
   - assumptions
   - but can develop guidelines to eliminate the dichotomous use of these concepts
Operationalizing Culture

Level of Assessment
- Environment
- Economy
- Technology
- Religion/World View
- Language –
  - Health Literacy
- Social Structure
- Beliefs and Values

Questions to define each level
- Environment (abiotic and biotic)
- Income, types of jobs
- Degree of technology involved and job qualities
- Religion/World View
  - How might this affect attitudes toward issue of focus?
- What is the decision making pattern of the group? Sex, gender issues, age, status?
- What particular constellation of belief and values may impact behavior change envisioned?
Ethnicity/ Health Acculturation Measures
Minimal Data Set

1. How do you identify your ethnic background(s)/ heritage(s)
OMB.D.15 + CTR + specify _____________, ____________, __________

2. Place of birth _______________
   2a. If not US: Age at immigration_____

3. Degree of value/pride/identification as:
   3a. Your ethnicity/heritage
       Specify (as many as needed)
       ___________ 1_______________10
       Not at all completely
       ___________ 1_______________10
       Not at all completely

   3b. Dominant U.S. modern culture 1_______________10

4. Do you know where you can go to get health care?
   Yes ____ Where? __________ No ____

Kagawa-Singer, 2000
5. Do you have a doctor for your medical care when you are well?  
   Yes ____  No ____  
   When you are sick?  Yes ____  No ____  
6. Do you feel you know how to use the health care system?  
   Not at all ____________________ Very  
7. Do you feel you can find the appropriate health care people to talk to?  
   Not at all ____________________ Very  
8. If you don’t understand what the provider is recommending, do you feel you can ask questions? Yes ____  No ____  
9. Are you confident you can follow-through with the answer(s)?  
   Not at all ____________________ Very  

Kagawa-Singer, 2000  
11-28-05
## Composite Measure of Ethnic Identity

1. Parental heritage
2. Generation in US/ Reason for immigration
   - Push/Pull
3. Ethnic group
   - Generation
   - Acculturation
   - Language
   - Beliefs & practices
   - Degree of personal identification and public identity
   - Number of identity groups and degree of overlap
4. Diet
5. Physical activity
6. Social choices
   - Circumstances or choice
7. Family structure/Support system
   - Composition
   - Age
8. SES
   - Income
   - Wealth
   - Education
9. Access to Health Care
   - Direct Cost
   - Insurance/Co-Payment
   - Sick leave/Vacation
   - Wait Time
   - Proximity/Accessibility
   - Transportation
   - Language capability of providers
10. Religion/Spirituality
    - Beliefs & practices
    - Internal/External locus of control
    - Worldview
11. Alternative health practices
    - Healers
    - Parallel or complementary use
12. Neighborhood (Social Capital)
    - Ethnic make-up
    - Aesthetics
    - Economic level/consonance
    - Stability
    - Degree of interaction
REVISED RESERVE CAPACITY & CUMULATIVE VULNERABILITY MODELS OF MINORITY HEALTH