Race, Racism and Health Equity

Go Global
August 11, 2015

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Disclosures

- Nothing to disclose
Race Matters: Perceptions of Race and Racism in a Sickle Cell Center

Stephen C. Nelson, MD1* and Heather W. Hackman, EdD2

Background. Health care disparities based on race have been reported in the management of many diseases. Our goal was to identify perceptions of race and racism among both staff and patients/families with particular attention to provider attitudes as a potential contributor to racial healthcare disparities. Procedure. A confidential survey addressing issues of race and health care was given to all patients with sickle cell disease and their families upon arrival to clinic. The survey was made available online to all staff in the hematology/oncology program. Free text comments were obtained. Results. We received completed surveys from 112 patients/families. Surveys were completed by 135 of 158 staff members (85% return rate). The majority (92.6%) of patients/families identified as black, while 94.1% of staff identified as white (P < 0.001). More patients/families felt that race affects the quality of health care for sickle cell patients (50% vs. 31.6%, P = 0.003). More staff perceived unequal treatment of patients, especially in the inpatient setting (20.9% vs. 10.9%, P = 0.03). Conclusions. Provider attitudes contribute to continued racial health care disparities. We propose training health care providers on issues of race and racism. Training should provide critical thinking tools for improving medical providers’ comfort and skills in caring for patients who are of a different race than their own. Pediatr Blood Cancer 2013;60:451–454. © 2012 Wiley Periodicals, Inc.

Key words: health care disparity; race; sickle cell disease
“It is less useful to continue to characterize an insidious problem if these efforts do not result in the design and implementation of interventions that lead to meaningful change.”
U.S. Death Rates-2009

- Black deaths 286,928
  - Crude death rate 924 per 100K

- Asian deaths 49,508
  - Crude death rate 413 per 100K
U.S. Black Deaths

- 128,248 excess deaths per year
- 10,687 deaths per month
- 2466 deaths per week
- 351 deaths per day
- 14 deaths per hour
- 1 death every 5 minutes
Why?

- Genetics
- SES, insurance, access, education
- Racism, Unconscious bias, Stereotypes
Health Care and Medical Education
Why?

- Genetics
Human Genome Project

- 1990s
- > 60 families’ genes analyzed
- NO people of African descent
- Howard University belatedly invited

- Race has no genetic basis
- Human subspecies do not exist
- Most variation is within, not between “races”
- www.understandingrace.org
Why?

- SES, insurance, access, education
- “racial disparities health”
- 2003- present
- 5271 citations!!
- 439 per year
- over 8 articles per week
Esophageal cancer treatment/outcomes

- 5 year survival
  - Whites 60%
  - Blacks 37%

- Black race independent factor
  - Controlled for age, sex, tumor location, histology
Arthritis-related hip/knee surgeries

Older blacks much lower rates of surgery
  – HR = 0.38 (95%CI = 0.16-0.55)

Race held as a factor when correcting health and economic differences
341,487 hysterectomies
- 295,857 abdominal
- 45,630 laparoscopic

Blacks less likely to have laparoscopic
- Odds Ratio 0.44 (95% CI 0.42-0.45)

Race was an independent association
Surgical mortality after major hepatectomy

- 17,794 patients
- Blacks had 2-fold greater mortality
  - Odds Ratio 2.22 (95% CI 1.38-3.57)
- Clinical factors, insurance status, and hospital factors do not account for this
  - Odds Ratio 2.15 (95% CI 1.28-3.61)
Surgical resection non-small cell lung CA
3056 patients
Surgery
- White 63.4%
- Black 44.7%
Controlled for SES, comorbidity, tumor factors
- Odds Ratio 0.43 (95% CI 0.34-0.55)
Opioid prescribing in US EDs (1993-2005)

Pain-related visits (42% of ED visits)

Patients who received opioids
- White 31%
- Black 23%
- Latino 24%

Opioid prescribing increased in all pts by 2005
- White 40%
- Black 32%
- ED wait times
- NHAMCS data 2003-2008
- General patient, SCD, long bone fracture
- SCD wait 25% longer than general sample
  - explained by black race
- SCD wait 50% longer than LBF group
  - even after correcting for race
Racial Disparities in Surgical Care
April 1990-December 2011
88 articles
Over 1.3 million patients
Almost all articles reported racial disparity
32 articles looked at independent factors
22 (70%) race was an independent factor
Racial-Ethnic Disparities in Management and Outcomes Among Children With Type 1 Diabetes

Steven M. Willi, MD, Kellee M. Miller, MPH, Linda A. DiMeglio, MD, MPH, Georgeanna J. Klingensmith, MD, Jill H. Simmons, MD, William V. Tamborlane, MD, Kristen J. Nadeau, MD, Julie M. Kittelsrud, CNP, Peter Huckfeldt, PhD, Roy W. Beck, MD, PhD, Terri H. Lipman, PhD, for the T1D Exchange Clinic Network
FIGURE 1

Insulin delivery regimen/method according to age and race/ethnicity. White section, pump users; black section, multiple daily injections; black and white striped section, fixed dose users.
FIGURE 2
Mean HbA1c level according to race/ethnicity and insulin regimen/method. MDI, multiple daily injections. White bar, non-Hispanic white; black bar, non-Hispanic black; black and white striped bar, Hispanic.
The Impact of Age and Race on Longevity in Pediatric Astrocytic Tumors: A Population-based Study

M. Constantine Samaan, MD,1,2* and Noori Akhtar-Danesh, PhD3,4

Fig. 2. Relative survival ratio based on race at diagnosis.

Fig. 3. Excess mortality rate (EMR) trends based on age group and race.
Racial/Ethnic and Socioeconomic Disparities in Survival Among Children With Acute Lymphoblastic Leukemia in California, 1988–2011: A Population-Based Observational Study

Renata Abrahão, MD, MSC,1,2* Daphne Y. Lichtensztajn, MD, MPH,2 Raul C. Ribeiro, MD,3 Neyssa M. Marina, MD,4 Ruth H. Keogh, PhD,2 Rafael Marcos-Gragera, MD, MSC, PhD,5 Sally L. Glaser, PhD,6,7 and Theresa H.M. Keegan, PhD, MSC,5,7

Fig 1. Overall survival by race/ethnicity among children (0–19 years old) diagnosed with acute lymphoblastic leukemia in California, 1988–2011.

Published online Apr 22, 2015
LETTER TO THE EDITOR
Racial Health Disparities: A Call to Action

To the Editor: I read with interest the article by Abrahão et al.,[1] which describes survival among children with acute lymphoblastic leukemia (ALL). This impressive study included over 9,000 patients. We should be proud of the progress made in treating children with ALL, as approximately 90% of children can expect to be cured. However, as the authors show, this progress is not being felt by our patients of color, especially our black patients. Black children with ALL had an approximate 20-year survival probability of 68%, compared to over 80% for white children.[1] This difference held when correcting for socioeconomic status (SES) and multiple other co-variables. Race is an independent factor in the outcomes of our patients with ALL.

Racial disparities are reported in the management of many diseases. A recent Medline search of “healthcare disparities and race” yields over 3,000 articles since 2003. We may attempt to reconcile this issue by highlighting differences in genetics and SES. However, in many reports, including that by Abrahão et al., discrepancies held when correcting for SES.

I applaud the authors and the Editor for publishing this work and shining a light on health inequity. However, I encourage us to stop publishing manuscripts that use the common practice of describing patient groups as “white” and “non-white.” I confess, I have used ASPHO, SIOP, and all of us, to pursue programs to increase awareness of race, racism, and whiteness and to improve our skills in caring for patients of color. Our group has shown that this can be done.[7]

Finally, I would like to underscore that while significant training for providers regarding racism will help lessen health inequity, the opposite is also true. The absence of substantial training on issues of race and racism will serve to perpetuate and potentially exacerbate racial disparities. If providers do not take responsibility for addressing the impact of race and racism in the provision of care, this responsibility falls on patients of color. This allows the dominant white group to avoid responsibility and places the perceived source of racial differences squarely on the target population. Until racial issues are honestly addressed by the healthcare team, it is unlikely that we will see significant improvements in racial health care disparities for our patients.

Stephen C. Nelson, MD
Pediatric Hematology/Oncology, Children’s Hospitals and Clinics of Minnesota, Minneapolis, Minnesota

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Disparities: Access measures for which members of selected groups experienced better, same, or worse access to care compared with reference group, 2012

- Blacks had worse access to care than Whites for about half of access measures.
- Hispanics had worse access to care than Whites for two-thirds of access measures.
- Asians and American Indians and Alaska Natives had worse access to care than Whites for about one-third of access measures.
Disparities: Number and percentage of quality measures for which members of selected groups experienced better, same, or worse quality of care compared with reference group.

- People in poor households received worse care than people in high-income households on more than half of quality measures (green).
- Blacks received worse care than Whites for about one-third of quality measures.
- Hispanics, American Indians and Alaska Natives, and Asians received worse care than Whites for some quality measures and better care for some measures.
OVERALL HEALTH SYSTEM PERFORMANCE FOR LOW-INCOME POPULATIONS

Source: Commonwealth Fund Scorecard on State Health System Performance for Low-Income Populations, 2013.
White population
NHDR Results

- Race is an independent factor
2014 NHDR
2014 NHDR
How are we doing in Minnesota?

Biology, Behavior, Society, Structure

DOWNSTREAM

UPSTREAM

Delivering Next Generation Care
Figure 10: Per capita income in the past 12 months, Minnesota 2012

- Total Minnesota per capita income: $30,529
- White: $32,750
- Asian: $25,121
- Hispanic*: $15,569
- American Indian: $17,014
- Black or African American: $14,820
Chart 4. Unemployment rates by race and Hispanic or Latino ethnicity, 2013 annual averages

- Total: 7.4%
- White: 6.5%
- Black or African American: 13.1%
- Asian: 5.2%
- American Indian and Alaska Native: 12.8%
- Native Hawaiian and Other Pacific Islander: 10.2%
- Two or More Races: 11.0%
- Hispanic or Latino: 9.1%

Note: People whose ethnicity is identified as Hispanic or Latino may be of any race. Source: U.S. Bureau of Labor Statistics, Current Population Survey (CPS).
Chart 5. Unemployment rates by race and Hispanic or Latino ethnicity, 1973–2013 annual averages

Note: People whose ethnicity is identified as Hispanic or Latino may be of any race. Data for Asians only available since 2000. Source: U.S. Bureau of Labor Statistics, Current Population Survey (CPS).

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Unemployment Rates Of Minnesota Labor Force By Race/Ethnicity 2009

2009 ACS

- White: 7.0%
- Black: 20.4%
- Am Indian: 20.5%
- Asian/PI: 12.1%
- Other: 14.4%
- Hispanic: 9.4%
- Total: 8.0%
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Disparities in employment

The unemployment rate of African Americans increased substantially faster than that of whites, regardless of breakdowns by gender, education, and age, since the start of the Great Recession.

“Twin Cities unemployment divide for black, white people is nation's widest”

Laura Yuen, Minnesota Public Radio October 12, 2011

<table>
<thead>
<tr>
<th>Unemployment rate for</th>
<th>Fourth quarter 2007</th>
<th>Second quarter 2009</th>
<th>Second quarter 2011</th>
<th>Difference between African Americans and whites for respective groups in second quarter 2011 (in percentage points)</th>
<th>Change since start of Great Recession (fourth quarter 2007 to second quarter 2011)</th>
<th>Difference in change since start of Great Recession between African Americans and whites for respective groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>8.4</td>
<td>14.8</td>
<td>18.1</td>
<td>8.2</td>
<td>7.7</td>
<td>5.8</td>
</tr>
<tr>
<td>White</td>
<td>4.9</td>
<td>8.8</td>
<td>7.9</td>
<td>3.9</td>
<td>3.9</td>
<td>3.9</td>
</tr>
<tr>
<td>African American men</td>
<td>8.2</td>
<td>14.0</td>
<td>18.3</td>
<td>10.0</td>
<td>9.1</td>
<td>4.0</td>
</tr>
<tr>
<td>White men</td>
<td>4.3</td>
<td>9.2</td>
<td>8.3</td>
<td>4.2</td>
<td>4.2</td>
<td>4.2</td>
</tr>
<tr>
<td>African American women</td>
<td>7.6</td>
<td>12.1</td>
<td>14.1</td>
<td>6.7</td>
<td>6.5</td>
<td>6.0</td>
</tr>
<tr>
<td>White woman</td>
<td>3.9</td>
<td>7.2</td>
<td>7.4</td>
<td>3.5</td>
<td>3.5</td>
<td>3.5</td>
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<tr>
<td>African American, no high school</td>
<td>13.6</td>
<td>20.7</td>
<td>26.0</td>
<td>14.0</td>
<td>12.4</td>
<td>7.2</td>
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<tr>
<td>White, no high school</td>
<td>6.8</td>
<td>13.6</td>
<td>12.0</td>
<td>5.2</td>
<td>5.2</td>
<td>5.2</td>
</tr>
<tr>
<td>African American, high school</td>
<td>7.3</td>
<td>11.9</td>
<td>15.9</td>
<td>7.5</td>
<td>8.6</td>
<td>4.3</td>
</tr>
<tr>
<td>White, high school</td>
<td>3.9</td>
<td>8.5</td>
<td>8.4</td>
<td>4.5</td>
<td>4.5</td>
<td>4.5</td>
</tr>
<tr>
<td>African American, college</td>
<td>3.9</td>
<td>7.6</td>
<td>6.9</td>
<td>3.0</td>
<td>3.0</td>
<td>1.8</td>
</tr>
<tr>
<td>White, college</td>
<td>3.9</td>
<td>4.1</td>
<td>3.9</td>
<td>2.1</td>
<td>2.1</td>
<td>2.1</td>
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<tr>
<td>African American, 35 to 44</td>
<td>6.4</td>
<td>12.2</td>
<td>12.6</td>
<td>6.3</td>
<td>6.2</td>
<td>2.8</td>
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<tr>
<td>White, 35 to 44</td>
<td>3.1</td>
<td>6.9</td>
<td>6.5</td>
<td>3.4</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>African American, 65+</td>
<td>4.4</td>
<td>9.0</td>
<td>9.4</td>
<td>5.5</td>
<td>5.0</td>
<td>5.0</td>
</tr>
<tr>
<td>White, 65+</td>
<td>3.2</td>
<td>6.2</td>
<td>5.9</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
</tr>
</tbody>
</table>

Note: All unemployment rates are in percent. All changes and differences are in percentage points.
### Table 11: High school students graduating on time by racial and ethnic group, Minnesota 2012

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percent</th>
<th>Disparity Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black or African American</td>
<td>51.0</td>
<td>1.6</td>
</tr>
<tr>
<td>American Indian</td>
<td>45.5</td>
<td>1.8</td>
</tr>
<tr>
<td>Asian</td>
<td>74.0</td>
<td>1.1</td>
</tr>
<tr>
<td>Hispanic</td>
<td>53.0</td>
<td>1.6</td>
</tr>
<tr>
<td>White (non-Hispanic)</td>
<td>83.9</td>
<td>1.0</td>
</tr>
</tbody>
</table>
Figure 13: Incarceration rate disparity ratio, Minnesota as of July 1, 2013

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Ratio to White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black or African American</td>
<td>10.3</td>
</tr>
<tr>
<td>American Indian</td>
<td>13.4</td>
</tr>
<tr>
<td>Asian</td>
<td>1.0</td>
</tr>
<tr>
<td>Hispanic*</td>
<td>2.3</td>
</tr>
</tbody>
</table>
Figure 11: Minnesota Prison Population by Ethnicity. *Data on Black population excludes those held as mentally ill patients.*
*Source: Council on Crime and Justice (2012b)*
# Homelessness in Minnesota

**Findings from the 2012 statewide homeless study**

## 5. Race and ethnicity of homeless adults and youth compared to overall Minnesota population

<table>
<thead>
<tr>
<th>Race</th>
<th>Percent of HOMELESS adults</th>
<th>Percent of all Minnesota adults</th>
<th>Percent of unaccompanied HOMELESS youth age 21 and under</th>
<th>Percent of all Minnesota youth 10-24</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian</td>
<td>10%</td>
<td>1%</td>
<td>13%</td>
<td>2%</td>
</tr>
<tr>
<td>Asian American</td>
<td>1%</td>
<td>4%</td>
<td>2%</td>
<td>6%</td>
</tr>
<tr>
<td>Black/African American</td>
<td>38%</td>
<td>5%</td>
<td>40%</td>
<td>7%</td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>42%</td>
<td>86%</td>
<td>33%</td>
<td>76%</td>
</tr>
<tr>
<td>Other/Mixed race</td>
<td>8%</td>
<td>3%</td>
<td>12%</td>
<td>6%</td>
</tr>
<tr>
<td>Hispanic (any race)</td>
<td>7%</td>
<td>4%</td>
<td>10%</td>
<td>7%</td>
</tr>
</tbody>
</table>

**Sources:**  
Wilder Research 2012 survey of homelessness and U.S. 2010 Census

**Note:** Column totals may be more than 100% because Hispanic ethnicity is asked independent of race.
Minnesota Uninsurance Rates by Race/Ethnicity

Source: Minnesota Department of Health, Minnesota Health Access Survey

Delivering Next Generation Care
How are we doing in Minnesota?
Delivering Next Generation Care

*per 1000 births
Life Expectancy in Minnesota
- White: 81.1 years
- Black: 75.4 years

Cancer deaths per 100,000 American men
- White: 217.8
- Black: 281.5

Cancer deaths per 100,000 Minnesota men
- White: 205.5
- Black: 295.0
http://www.bcbsmnnfoundation.org/
10. Mortality rates* by race and ethnicity, Twin Cities 7-county region

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian</td>
<td>814</td>
</tr>
<tr>
<td>Black, U.S.-born</td>
<td>704</td>
</tr>
<tr>
<td>Southeast Asian, Foreign-born</td>
<td>275</td>
</tr>
<tr>
<td>ALL</td>
<td>248</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>232</td>
</tr>
<tr>
<td>Black, foreign-born</td>
<td>225</td>
</tr>
<tr>
<td>Hispanic</td>
<td>213</td>
</tr>
<tr>
<td>Asian, other</td>
<td>132</td>
</tr>
</tbody>
</table>

* Age-standardized deaths per 100,000, among the population age 25-64 during the years 2005 to 2007.
Source: Minnesota Department of Health (mortality rates calculated by Wilder Research).
12. Median household income by ZIP code, 2000

Life expectancy by ZIP code

- 83 + years (16)
- 79 to 82.9 years (69)
- 75 to 78.9 years (39)
- 70 to 74.9 years (8)
- no data (0)
17. Mortality rates* by race within median household income group of ZIP codes

- American Indian
- Black
- White, non-Hispanic
- Hispanic
- Asian

* Mortality rates are presented across different income brackets, showing variations by race.
Twin Cities Mortality-Wilder Study

- Race is an independent factor
- Children with long bone fracture
- ED 1-yr period
- N=880 with pain scores
- Time from injury to arrival in ED
  - White 8.3 hours
  - Black 10.7 hours \( p=0.014 \)
  - Biracial 11.9 hours \( p=0.004 \)
  - Native American 18.4 hours \( p=0.025 \)
76,931 ED encounters

Mar 2, 2009- Mar 31, 2010

Wait Times

- White: 32 minutes
- Black: 37 minutes
- Native American: 41 minutes
- Hispanic: 39 minutes

$P < 0.001$
- 76,931 ED encounters
- Mar 2, 2009- Mar 31, 2010
- Odds Ratio of LWCET
  - Black 2.04
  - Native American 3.59
  - Hispanic 2.15
  - Biracial 2.77

\[ P < 0.001 \]
Children with long bone fracture

ED 1-yr period

N=878

Opioid-containing prescription

- White 67.4%
- Black 47.1% RR 0.59
- Hispanic 47.9% RR 0.61
- Native American 58.3% RR 0.93
- Biracial 40.3% RR 0.45
Chart review long bone fractures
Jan 1 2008-Dec 31 2010
2206 patients
- 1386 M  820F

Bone
- Radius/ulna  1116
- Humerus  566
- Ankle  189
- Tib/fib  173
- Femur  162
Mean time to getting pain med 50.3 min

Black 64 minutes

White 45 minutes

IV narcotics
- White 57.8%
- Black 48.4% p <0.001
Conclusions

- Racial and cultural differences need study to identify:
  - Variable tolerance to pain
  - Hesitation to reporting pain based on culture or poor health care literacy
Health Care Barriers

- **System**
  - insurance
  - poverty
  - geography
  - transition to adult care
  - research and support money
  - Whiteness

- **Patients**
  - lack of knowledge
  - fear
  - trust

- **Community**
  - advocacy
  - public awareness

- **Providers**
  - bias
  - attitudes/expectations
OECD countries’ health care spending and longevity

Per capita spending US$

USA

Japan
OECD Health Data 2009
OECD Health Data 2009
Public Health Funding by State

State dollars dedicated to public health and federal dollars directed to states by CDC and the HRSA

Top 5 States
- Alaska $219
- Hawaii $213
- New York $149
- Idaho $137
- West Virginia $135
- United States $90

Bottom 5 States
- Nevada $39
- Wisconsin $44
- Arizona $44
- Indiana $44
- Ohio $45
- United States $90

Minnesota $48 = #44
Delivering Next Generation Care
Sickle Cell Disease: A Question of Equity and Quality

Lauren A. Smith, Suzette O. Oyeku, Charles Homer and Barry Zuckerman

Pediatrics 2006;117;1763-1770
### TABLE 1 NIH Research Funding and Private, Nonprofit Association Support of SCD and Cystic Fibrosis

<table>
<thead>
<tr>
<th>Variable</th>
<th>SCD</th>
<th>Cystic Fibrosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>US prevalence</td>
<td>80,000</td>
<td>30,000</td>
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</table>

**Federal support**

<table>
<thead>
<tr>
<th>Variable</th>
<th>SCD</th>
<th>Cystic Fibrosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIH fiscal-year 2004 funding, in millions of dollars</td>
<td>90</td>
<td>128</td>
</tr>
<tr>
<td>NIH funding per person with disease, $</td>
<td>1125</td>
<td>4267</td>
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</table>

**No. of federal grants**

<table>
<thead>
<tr>
<th>Number of grants funded</th>
<th>SCD</th>
<th>Cystic Fibrosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1968</td>
<td>22</td>
<td>65</td>
</tr>
<tr>
<td>1972</td>
<td>215</td>
<td>80</td>
</tr>
<tr>
<td>2004</td>
<td>331</td>
<td>459</td>
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</table>

**Private philanthropic support, $**

<table>
<thead>
<tr>
<th>Foundation</th>
<th>SCD</th>
<th>Cystic Fibrosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cystic Fibrosis Foundation 2003 annual revenue</td>
<td></td>
<td>152,231,000</td>
</tr>
<tr>
<td>Sickle Cell Disease Association of America 2003 annual revenue</td>
<td>498,577</td>
<td></td>
</tr>
<tr>
<td>Revenue per person affected with disease</td>
<td>6</td>
<td>5074</td>
</tr>
<tr>
<td>Total NIH and private support, in millions, $</td>
<td>90.4</td>
<td>280.2</td>
</tr>
<tr>
<td>Total support per person affected with disease, $</td>
<td>1130</td>
<td>9340</td>
</tr>
</tbody>
</table>
- Funding per patient
  - NIH: 3.8-fold higher for CF
  - Foundation: 350-fold higher for CF
  - Combined: 11-fold greater for CF

- NIH Career Development Awards
  - same

- New Drug Approval (2009-2013)
  - CF: 5
  - SCD: 0

- Publications (2005-2010)
  - 2:1 CF:SCD
Health Care Barriers
Structure/Systems

- **System**
  - insurance
  - poverty
  - geography
  - transition to adult care
  - research and support money
  - Whiteness/racism

- **Providers**
  - bias
  - attitudes/expectations
  - Whiteness/racism

- **Patients**
  - lack of knowledge
  - fear
  - trust

- **Community**
  - advocacy
  - public awareness
US Census

- Population: 308,745,538
- 97.1% identify as one race

<table>
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<tr>
<th></th>
<th>2010</th>
<th>2000</th>
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<tr>
<td>White</td>
<td>72.4%</td>
<td>75.1%</td>
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<tr>
<td>Black</td>
<td>12.6%</td>
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<td>4.8%</td>
<td>3.6%</td>
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<tr>
<td>Latino</td>
<td>16.3%</td>
<td>12.5%</td>
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### Minnesota

- **Population**: 5,303,925
- **97.6% identify as one race**

<table>
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<tr>
<th>Race</th>
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<tr>
<td>White</td>
<td>85.3%</td>
<td>89.4%</td>
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<tr>
<td>Black</td>
<td>5.2%</td>
<td>3.5%</td>
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<tr>
<td>Asian</td>
<td>4.0%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Latino</td>
<td>4.7%</td>
<td>2.9%</td>
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</table>
2013
9.9% of RNs in the US are Black

57,639 RNs in Minnesota

2997 Black RNs in Minnesota (5.2%)
Graph A
Non-White Registered Nurses by Year of First License
Minnesota 2011-2012

*Hispanic origin is asked separately from race, so individuals identifying as Hispanic can be of any race.
Diversity in the Physician Workforce: Facts & Figures 2010
Figure 1: U.S. MD Physicians by Race and Ethnicity, 2008

- White: 75.0% (353,311)
- Asian*: 12.8% (60,090)
- Black or African American: 6.3% (29,775)
- Hispanic or Latino**: 5.5% (25,717)
- American Indian/Alaska Native***: 0.5% (2,515)

Note: The data include U.S. medical school graduates from 1978 to 2008 only. N = 471,408.
*Asian includes Chinese, Filipino, Korean, Japanese, Vietnamese, Indian/Pakistani, and Other Asian.
**Hispanic or Latino includes Mexican American, C'Waen舌th Puerto Rican, Mainland Puerto Rican, and Other Hispanic.
***From 1997 to 2000, the category “American Indian/Alaska Native” also included Native Hawaiian. Prior to 1997 and since 2001, this category only includes American Indian/Alaska Native.
Figure 15: Black or African-American U.S. MD Physicians by Graduation Year and Sex, 1978 - 2008

Note: The data include U.S. medical school graduates from 1978 to 2008 only. N = 29,774.
Total Graduates by U.S. Medical School and Race and Ethnicity 2013

- University of Minnesota
  - Total Graduates: 220
  - Predicted black (5.2%): 11
  - Actual black graduates: 1

- 2014: 5
Minnesota Physicians 2013

- 13,083 physicians
- 5.2% Black = 680
- Black physicians = 261
Race and ethnicity of licensed physicians in Minnesota

Race

- White: 72%
- Asian: 8%
- Black: 2%
- Multiple races: 1%
- Other: 3%
- Unknown*: 14%

Ethnicity

- Non-Hispanic: 84%
- Hispanic/Latino: 2.4%
- Unknown*: 14%

Source: 2013 MDH Physician Workforce Survey. Respondents may choose not to answer certain questions on the survey. 1,399 out of 10,809 (14 percent) did not answer the survey question about race. 1,388 (13.9 percent) of respondents did not answer the survey question about ethnicity.
Figure 20: U.S. Medical Schools Graduating 499 or More Black or African-American MD Physicians, 1978-2008

- Howard: 2,325
- Meharry: 1,907
- Illinois, University of: 780
- Wayne State: 701
- Morehouse: 599
- Temple: 581
- North Carolina: 555
- Harvard: 528
- SUNY-Downstate: 508
- Michigan, University of: 499

Note: The data include U.S. medical school graduates from 1978 to 2008 only.
Figure 24: U.S. Medical Schools Graduating 4,386 or More White MD Physicians, 1978-2008

- Indiana: 7,202 graduates
- Minnesota: 5,910 graduates
- Illinois, University of: 5,856 graduates
- Wayne State: 5,692 graduates
- Jefferson: 5,363 graduates
- Ohio State: 5,175 graduates
- Georgetown: 4,706 graduates
- Wisconsin, Medical College of: 4,531 graduates
- Georgia, Medical College of: 4,491 graduates
- Kansas: 4,386 graduates

Clinical Trials

- National Institutes of Health
- Revitalization Act of 1993 signed into law
- NIH policy requiring “that women and members of minority groups and their subpopulations must be included in all NIH-funded clinical research”
Inclusion of Minorities and Women in Cancer Clinical Trials, a Decade Later: Have We Improved?

Kat Kwiatkowski, MPH¹; Kathryn Coe, PhD¹; John C. Bailar, MD²; and G. Marie Swanson, PhD, MPH¹

# TABLE 3. Enrollment Characteristics of Studies which Included Minorities and Women

<table>
<thead>
<tr>
<th>Enrollment Characteristic</th>
<th>2001-2010</th>
<th>1990-2000</th>
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<tr>
<td>Treatment trials</td>
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<tr>
<td>Articles that reported race/ethnicity</td>
<td>143 (51.6)</td>
<td>57 (35.1)</td>
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<tr>
<td>Number of participants included</td>
<td>104,337</td>
<td>45,815</td>
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<tr>
<td>when race/ethnicity information was reported</td>
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<tr>
<td>White</td>
<td>86,484 (82.9)</td>
<td>40,803 (89.0)</td>
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<tr>
<td>African American</td>
<td>6403 (6.1)</td>
<td>4811 (10.5)</td>
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<tr>
<td>Hispanic</td>
<td>2333 (2.2)</td>
<td>183 (0.4)</td>
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<tr>
<td>Asian</td>
<td>3398 (3.3)</td>
<td>18 (0.04)</td>
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<tr>
<td>American Indian</td>
<td>79 (0.1)</td>
<td>NR</td>
</tr>
<tr>
<td>Other</td>
<td>5640 (5.4)</td>
<td>NR</td>
</tr>
</tbody>
</table>
Participation in Pediatric Oncology Research Protocols: Racial/Ethnic, Language and Age-Based Disparities

Paula Aristizabal, MD, MAsc, Jenelle Singer, MPH, Renee Cooper, MPH, Kristen J. Wells, PhD, MPH, Jesse Nodora, DrPH, Mehrzad Milburn, RN, BSN, CCRC, Sheila Gahagan, MD, MPH, Deborah E. Schiff, MD, and Maria E. Martinez, PhD

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Not enrolled (N = 48)</th>
<th>Enrolled (N = 206)</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Non-Hispanic White</td>
<td>11 (12%)</td>
<td>80 (88%)</td>
<td>1.00</td>
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<tr>
<td>Hispanic</td>
<td>27 (25%)</td>
<td>82 (75%)</td>
<td>0.42* (0.19, 0.90)</td>
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<tr>
<td>Asian/Pacific Islander</td>
<td>5 (26%)</td>
<td>14 (74%)</td>
<td>0.39 (0.12, 1.28)</td>
</tr>
<tr>
<td>Black Non-Hispanic</td>
<td>2 (29%)</td>
<td>5 (71%)</td>
<td>0.34 (0.06, 1.99)</td>
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<tr>
<td>Mixed/multiple</td>
<td>3 (11%)</td>
<td>25 (89%)</td>
<td>1.15 (0.30, 4.44)</td>
</tr>
</tbody>
</table>
Medical Education

- **Who teaches us?**
  - White physicians
  - 4% faculty AA, Latino, Native American (AAMC 2009)

- **What are we taught?**
  - Downstream issues
  - The almighty $p$ value
  - Evidence-based protocols developed by majority white researchers, using majority white patients, carried out by the majority white health care system

- **What are we not taught?**
  - Upstream issues
  - Humanism
  - Racism
Health Care Barriers

- **System**
  - insurance
  - poverty
  - geography
  - transition to adult care
  - research and support money
  - Whiteness

- **Patients**
  - lack of knowledge
  - fear
  - trust

- **Community**
  - advocacy
  - public awareness

- **Providers**
  - bias
  - attitudes/expectations
Race and Health Care

- The legacy of slavery, segregation, and racism can make it difficult for African-Americans to trust the health care system
  - Experimentation on slaves 1619
  - Tuskegee experiment 1932-1972
  - Involuntary sterilization 1974
  - Attitudes about AIDS present
Delivering Next Generation Care
Dying While Black
Vernellia Randall, J.D.

An in-depth look at a crisis in the American healthcare system.
Health Care Barriers

- **System**
  - insurance
  - poverty
  - geography
  - transition to adult care
  - research and support money

- **Patients**
  - lack of knowledge
  - fear
  - trust

- **Community**
  - advocacy
  - public awareness

- **Providers**
  - bias
  - attitudes/expectations
FDA

- FDA approved drugs
- HIV-1981

37
FDA

- FDA approved drugs
- Sickle Cell disease – 1910
Why is this true?

- Whites
  - NHF
  - ACT UP
- Blacks
  - SCDAA
- System
- Power
- Money
“We hope that work on the safety of hydroxyurea in children with sickle cell disease will show soon that they can also be treated safely with the drug.”

“Hydroxyurea is a well-known drug, however its use in sickle cell disease is relatively new and must be approached with caution.”
Hydroxyurea Timeline

- Phase III MSH trial [16]
- Phase I/II trial in infants (HUSOFT) [22]
- SWiCH trial enrollment begins
- Proof of Principle studies [11-14]
- Phase I/II trial in children (HUG-KIDS) [21,23,24]
- Prevention of organ damage [48-54,57,59]
- Short-term pediatric efficacy [17-20]
- Follow-up to MSH [29]
- Lowering TCD velocities [55,56]
- BABY HUG Results
- BABY HUG enrollment begins
- HUSOFT extension [28]
- TWiCH trial begins
- Prevention of secondary CVA [58]

Delivering Next Generation Care
Health Care Barriers

- System
  - insurance
  - poverty
  - geography
  - transition to adult care
  - research and support money

- Patients
  - lack of knowledge
  - fear
  - trust

- Community
  - advocacy
  - public awareness

- Providers
  - bias (racism)
  - stereotyping
  - attitudes/expectations
Race and sex of a patient independently influence how physicians manage chest pain.

Provider Barriers to Hydroxyurea Use in Adults with Sickle Cell Disease: A Survey of the Sickle Cell Disease Adult Provider Network

Sophie Lanzkron, MD; Carlton Haywood Jr., MA; Kathryn L. Hassell, MD; and Cynthia Rand, PhD
Unpacking Racism and its Health Consequences

April 2011

THE IMPACT OF RACISM ON CLINICIAN COGNITION, BEHAVIOR, AND CLINICAL DECISION MAKING

Michelle van Ryn et al.

Dept of Family Medicine and Community Health
University of Minnesota
Unconscious biases

- Common
- Rooted in stereotyping
  - cognitive process where we use social categories to acquire, process, and recall information about people
- Helps us organize complex information
- Heavy cognitive load
  - rely on stereotyping to process information
  - consciously reducing this is hard work
“Crisis”

- [http://www.youtube.com/watch?v=FuelQDBOXxI](http://www.youtube.com/watch?v=FuelQDBOXxI)
“It is less useful to continue to characterize an insidious problem if these efforts do not result in the design and implementation of interventions that lead to meaningful change.”
“Unequal Treatment”

- Institute of Medicine
- March 2002
- Findings
  - Racial disparities exist and are unacceptable
  - These exist within broader social inequalities
  - Multifactorial
    - Bias, stereotyping and prejudice on the part of health care providers contribute to racial and ethnic disparities
  - Small number of patients refuse therapy, this does not fully explain disparities
IOM Recommendations

- Raise awareness of disparities
- Legal, regulatory and policy changes
- Health systems changes
- Help patients navigate the system
- Cross-cultural education for providers
- Collect data on race, SES, language
- Research sources of disparities and interventions
Provider Training

- Diversity Training
  - Awareness
  - Appreciation

- Cultural Competency
  - Cross-cultural communication
  - Information gathering
  - Skills training
Provider Training

- Social Justice
  - Oppression
  - Power
  - Societal resources
  - Structural barriers
  - Race/racism/whiteness
Provider Trainings

- Address the definition of race/racism and history of the social construction of race
- Differentiate among diversity, cultural competency, and social justice
- Explore our current health care system (racial make-up of providers, how insurance became tied to employment, what we’re taught/not taught in school, evidence-based medicine, racial disparities)
- Examine racism/whiteness in our society, including examples of racism/whiteness in medicine
- Examine how race affects each of the Institute of Medicine's six measures of quality care, and provide trainees tools for understanding these effects
- Introduce critical thinking tools for improving medical providers’ comfort and skills in caring for patients of color
N=19, Family Medicine residents
- 5 M, 14 F
- 10 white, 7 Asian, 2 black
- Mean age 31.9 years
  - M= 32.8 yrs
  - F= 31.6 yrs
- Hours of prior racism training
  - 24 hrs total
  - 1.26 hrs/person
  - 13 of 19 had NO training (68%)
  - One person reported 10 hrs of racism training
Assessment

- 1. My awareness level of issues of racism in the U.S. is:

- 2. The impact of racism on health care delivery is:

- 3. I am as effective at caring for white patients as I am at caring for patients of color.

- 4. I feel well equipped to care for patients of color.

- 5. The impact of racism on my ability to deliver quality care is:
## Results

<table>
<thead>
<tr>
<th>Statement</th>
<th>Pre</th>
<th>Post</th>
<th>$P$</th>
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<td><strong>Awareness of racism</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
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<td>3.40</td>
<td>3.89</td>
<td>0.036</td>
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<tr>
<td>WHITE</td>
<td>3.40</td>
<td>3.89</td>
<td>0.036</td>
</tr>
<tr>
<td>POC</td>
<td>3.40</td>
<td>3.45</td>
<td>0.422</td>
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<td>Impact of racism on health care</td>
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<td>POC</td>
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<td>Effective caring for white patients as POC</td>
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<td>Well-equipped to care for POC</td>
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<td>POC</td>
<td>2.44</td>
<td>3.25</td>
<td>0.1206</td>
</tr>
</tbody>
</table>

POC = person of color
Discussion

- Awareness of racism and its impact on delivering quality care increased significantly in all participants.
- Deconstructed white providers’ previously held beliefs about race and racism.
  - first step in working on our own racism and unconscious biases.
- This was a small cohort.
- Further study is warranted to define and refine the best training methods.
BRIEF REPORT
Training Providers on Issues of Race and Racism Improve Health Care Equity

Stephen C. Nelson, MD,1,2* Shailendra Prasad, MD, MPH,3 and Heather W. Hackman, EdD2

Race is an independent factor in health disparity. We developed a training module to address race, racism, and health care. A group of 19 physicians participated in our training module. Anonymous survey results before and after the training were compared using a two-sample t-test. The awareness of racism and its impact on care increased in all participants. White participants showed a decrease in self-efficacy in caring for patients of color when compared to white patients. This training was successful in deconstructing white providers’ previously held beliefs about race and racism. Pediatr Blood Cancer 2015;62:915–917. © 2015 Wiley Periodicals, Inc.

Key words: health care disparity; race; unconscious bias
April 15, 1912
<table>
<thead>
<tr>
<th>Pattern</th>
<th>GENDER</th>
<th>CLASS</th>
<th>AGE</th>
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<td>crew</td>
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<td>20</td>
<td>87.0</td>
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</table>

Total 2,201 711 32.2
April 15, 1912
January 15, 2009

Coach  1st Class

Delivering Next Generation Care
“Of all forms of inequity, injustice in healthcare is the most shocking and inhumane.”

Martin Luther King, Jr.
National Convention of the Medical Committee for Human Rights, Chicago- 1966
“Not everything that is faced can be changed. But nothing can be changed until it is faced”

James Arthur Baldwin - novelist, essayist, playwright, poet
(August 2, 1924 – December 1, 1987)
got privilege?