Social Determinants of Health—Its Place in Redefining Medicine

Friday, November 4, 2011
3:30pm-5:00pm
Presenters:

Moderator:

Brenda Latham-Sadler, M.D.

Presenters:

Will Ross, M.D., M.P.H.
Keydron Guinn, Ph.D.
Cynthia Arndell, M.D., R.N.
Luis Manriquez
Zachary Borus, M.D., M.P.H.
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Associate Professor of Medicine
Washington University School of Medicine

Disclosures:
Pfizer Pharmaceuticals - Consultant, Speaker’s Bureau
Genzyme - Consultant, Grant Support
Mid America Transplant Services – Director’s Fees
Learning Objectives

Provide a definition and concrete examples of the social determinants of health;

Understand the pathways and mechanisms through which social determinants shape the health chances of communities;

Understand the political and economic dynamics, from national to global, which reproduce health damaging environments;

Be familiar with the broad range of strategies which may be used to address the social and environmental determinants of health;

Develop a dynamic curriculum that incorporates social determinants of health in medical student education
“More than at any other time in history, mankind faces a crossroads. One path leads to despair and utter hopelessness. The other, to total extinction. Let us pray we have the wisdom to choose correctly.”

Woody Allen
Poverty, social exclusion, poor housing and poor health systems are among the main social causes of ill health.
Determinants of Health and Illness

Source: Dahlgren and Whitehead, 1991
Poverty is relative

“In both rich and poor countries, poverty means not participating fully in society, and having limits on leading the life one has reason to value.”

Sir Michael Marmot
Twenty-five-year age-adjusted mortality rate ratios by employment grade: Whitehall I study

van Rossum et al, JECH 2000

Marmot M Int. J. Epidemiol. 2001;30:1165-1171
Mortality at Titanic
by passenger class, men and women

From Broom L & Selznick P, 1968
...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, which are themselves influenced by policy choices. The social determinants of health are mostly responsible for health inequities - the unfair and avoidable differences in health status seen within and between countries


The World Health Organization defines Social Determinants Of Health as:
Social Determinants of Health

Life-enhancing resources, such as food supply, housing, economic and social relationships, transportation, education and health care, whose distribution across populations effectively determines length and quality of life.

Place Matters

Communities of Opportunity
- Parks
- Sidewalks
- Grocery Stores
- Financial Institutions
- Better Performing Schools
- Good Public Transportation

Good Health Status

Low-Income Communities
- Fast Food Restaurants
- Liquor Stores
- Unsafe/Limited Parks
- Poor Performing Schools
- Increased Pollution and Toxic Waste Sites
- Limited Public Transportation

Poor Health Status

Contributes to Health disparities:
- Obesity
- Diabetes
- Asthma
- Infant mortality

Reference: PolicyLink
Our environments cultivate our, communities and our communities nurture our health.

When inequities are high and community assets are low, health outcomes are worst.

Substance Abuse  Smoking  Violence
HIV/AIDS  Infant Mortality
Malnutrition  Obesity  Depression
Heart Disease

When inequities are low and community assets are high, health outcomes are best.

Infectious Diseases  Malnutrition  Heart Disease
Stress  Depression  Substance Abuse
Smoking  Violence

Fragmented Systems  Restricted Power  Disinvestment  Disconnected Members
Adverse Living Conditions  Segregation  Poor Quality Schools
Marketing for Tobacco and Alcohol  Occupational Hazards  Institutional Racism
Environmental Toxins  Unemployment  Discrimination

Quality Schools  Access to Healthy Foods  Access to Healthcare
Access to Recreational Facilities  Clean Environment  Transportation Resources
Adequate Income  Health Insurance  Quality Housing  Jobs

CDC

2011 ANNUAL MEETING

AAMC
Why emphasize social determinants

• Social determinants of health have a direct impact on health

• Social determinants predict the greatest proportion of health status variance (health inequity)

• Social determinants of health structure health behaviors

• Social determinants of health interact with each other to produce health (or disease)

Dennis Raphael
County Health Rankings model 2010 UWPHI
“... a state of complete physical, mental, and social well-being and not merely the absence of disease and infirmity.”

But it also includes...

“... governments have a responsibility for the health of their peoples which can be fulfilled only by the provision of adequate health and social measures”.
WHO Commission on Social Determinants of Health
Three principles of action:

➢ Improve the conditions of daily life – the circumstances in which people are born, grow, live, work, and age.

➢ Tackle the inequitable distribution of power, money, and resources – the structural drivers of those conditions of daily life – globally, nationally, and locally.

➢ Measure the problem, evaluate action, expand the knowledge base, develop a workforce that is trained in the social determinants of health, and raise public awareness about the social determinants of health.

Sir Michael Marmot, Chair, Commission of Social Determinants of Health, 2008
Can we as a country afford to address social determinants of health?: Countering the financial, market-based argument with an egalitarian, moral-based one.
The Marshall Plan

“American should do whatever it is able to do to assist in the return of normal economic health in the world, without which there can be no political stability and no assured peace.”

Secretary of State George C. Marshall
June 5, 1947
Harvard University

Children playing amid new housing construction in Marseille, France. Courtesy of the George C. Marshall Research Library, Lexington, Virginia. GCMRL#3118)
International Comparison of Spending on Health, 1980–2007

Average spending on health per capita ($US PPP)

Total expenditures on health as percent of GDP

Note: $US PPP = purchasing power parity.
### Exhibit ES-1. Overall Ranking

<table>
<thead>
<tr>
<th>Country Rankings</th>
<th>1.00–2.33</th>
<th>2.34–4.66</th>
<th>4.67–7.00</th>
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<tbody>
<tr>
<td>AUS</td>
<td>3</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>CAN</td>
<td>6</td>
<td>1</td>
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<td>GER</td>
<td>4</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>NETH</td>
<td>1</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>NZ</td>
<td>5</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>UK</td>
<td>2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>US</td>
<td>7</td>
<td>6</td>
<td>5</td>
</tr>
</tbody>
</table>

#### Quality Care
- AUS: 4
- CAN: 7
- GER: 5
- NETH: 2
- NZ: 1
- UK: 3
- US: 6

#### Effective Care
- AUS: 2
- CAN: 7
- GER: 6
- NETH: 3
- NZ: 5
- UK: 1
- US: 4

#### Safe Care
- AUS: 6
- CAN: 5
- GER: 3
- NETH: 1
- NZ: 4
- UK: 2
- US: 7

#### Coordinated Care
- AUS: 4
- CAN: 5
- GER: 7
- NETH: 2
- NZ: 1
- UK: 3
- US: 6

#### Patient-Centered Care
- AUS: 2
- CAN: 5
- GER: 3
- NETH: 6
- NZ: 1
- UK: 7
- US: 4

#### Access
- AUS: 6.5
- CAN: 5
- GER: 3
- NETH: 1
- NZ: 4
- UK: 2
- US: 6.5

#### Cost-Related Problem
- AUS: 6
- CAN: 3.5
- GER: 3.5
- NETH: 2
- NZ: 5
- UK: 1
- US: 7

#### Timeliness of Care
- AUS: 6
- CAN: 7
- GER: 2
- NETH: 1
- NZ: 3
- UK: 4
- US: 5

#### Efficiency
- AUS: 2
- CAN: 6
- GER: 5
- NETH: 3
- NZ: 4
- UK: 1
- US: 7

#### Equity
- AUS: 4
- CAN: 5
- GER: 3
- NETH: 1
- NZ: 6
- UK: 2
- US: 7

#### Long, Healthy, Productive Lives
- AUS: 1
- CAN: 2
- GER: 3
- NETH: 4
- NZ: 5
- UK: 6
- US: 7

#### Health Expenditures/Capita, 2007
- AUS: $3,357
- CAN: $3,895
- GER: $3,588
- NETH: $3,837
- NZ: $2,454
- UK: $2,992
- US: $7,290

Note: * Estimate. Expenditures shown in $US PPP (purchasing power parity).
U.S. Lags Other Countries: Mortality Amenable to Health Care

Deaths per 100,000 population*

<table>
<thead>
<tr>
<th>Country</th>
<th>1997–98</th>
<th>2006–07</th>
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<tbody>
<tr>
<td>France</td>
<td>76</td>
<td>55</td>
</tr>
<tr>
<td>Australia</td>
<td>88</td>
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</tr>
<tr>
<td>Italy</td>
<td>89</td>
<td>81</td>
</tr>
<tr>
<td>Japan</td>
<td>68</td>
<td>61</td>
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<tr>
<td>Sweden</td>
<td>88</td>
<td>61</td>
</tr>
<tr>
<td>Norway</td>
<td>99</td>
<td>64</td>
</tr>
<tr>
<td>Netherlands</td>
<td>97</td>
<td>66</td>
</tr>
<tr>
<td>Austria</td>
<td>109</td>
<td>74</td>
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<tr>
<td>Finland</td>
<td>116</td>
<td>76</td>
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<tr>
<td>Germany</td>
<td>110</td>
<td>77</td>
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<tr>
<td>Greece</td>
<td>97</td>
<td>78</td>
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<tr>
<td>Ireland</td>
<td>134</td>
<td>79</td>
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<tr>
<td>New Zealand</td>
<td>115</td>
<td>80</td>
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<tr>
<td>Denmark</td>
<td>113</td>
<td>83</td>
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<tr>
<td>United Kingdom</td>
<td>127</td>
<td>96</td>
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<tr>
<td>United States</td>
<td>120</td>
<td></td>
</tr>
</tbody>
</table>

* Countries’ age-standardized death rates before age 75; including ischemic heart disease, diabetes, stroke, and bacterial infections. Analysis of World Health Organization mortality files and CDC mortality data for U.S.

The Millennium Preston Curve

life expectancy, 2000

10,000 20,000 30,000 40,000

0 10,000 20,000 30,000 40,000

gdp per capita, 2000, current PPP $
Life Expectancy and Income For Selected Countries and Time Periods

World Bank Development Report 1993
Global Burden of Disease

From Ezzati et al, Lancet 2002

Childhood and maternal undernutrition

• Underweight
• Iron deficiency
• Vitamin A deficiency
• Zinc deficiency

Other nutrition-related risk factors and physical activity

• High blood pressure
• High cholesterol
• High BMI (overweight and obesity)
• Low fruit and vegetable intake
• Physical inactivity

Sexual and reproductive health

• Unsafe sex
• Lack of contraception

Addictive substances

• Tobacco
• Alcohol
• Illicit drugs

Environmental risks

• Unsafe water, sanitation, and hygiene
• Urban outdoor air pollution
• Indoor smoke from solid fuels
• Lead
• Global climate change

Occupational risks

• Risk factors for injuries
• Carcinogens
• Airborne particulates
• Ergonomic stressors
• Noise

Other selected risks

• Unsafe health-care injections
• Childhood sexual abuse
REACHING FOR A HEALTHIER LIFE
Facts on Socioeconomic Status and Health in the U.S.

The John D. and Catherine T. MacArthur Foundation Research Network on Socioeconomic Status and Health
THE IMPACT OF INEQUALITY
HOW TO MAKE SICK SOCIETIES HEALTHIER

RICHARD WILKINSON

"Thoughtful and provocative...impels us to develop new approaches to bridge the inequalities that divide our society and make us sick." — The New England Journal of Medicine
Income inequality and life expectancy at birth among industrialised countries

![Graph showing the relationship between income inequality and life expectancy. The Gini coefficient is plotted on the x-axis and life expectancy at birth in 2001 on the y-axis. Countries such as Japan, Sweden, and the USA are shown with lower Gini coefficients and higher life expectancy, while countries like Singapore and Portugal are shown with higher Gini coefficients and lower life expectancy. The correlation coefficient is $r = -0.864; p < 0.001$.]

UNNATURAL CAUSES

...is inequality making us sick?

A seven-part documentary series exploring racial & socioeconomic inequalities in health.

Do we ALL have an EQUAL chance for HEALTH?

Replay »
Pathways by Which Socioeconomic Status Affects Health Behaviors

Environment (physical, social, built)

Socioeconomic Resources

Psychological Resources (coping skills, resiliency, optimism)

Health Behaviors

Health
At the nexus of theory and practice: improving health outcomes by addressing social determinants
Youth Violence

Are “get tough” policies the best approach?

Several recent violent crimes by youths, including the vicious beating death of a Chicago honor student by a mob of teenagers, have sparked a new look at urban youth violence. Despite a steep overall drop in youth crime in recent years, researchers say many urban areas continue to be plagued by homicide and other violence involving young offenders. Some experts say tougher sentencing laws and a greater focus on parental responsibility are the best ways to fight the violence, while others argue for more federal money for social programs and anti-violence efforts. In some cities, collaborative approaches involving police, educators, community leaders and neighborhood groups are aimed at pressing youths to forsake violence while offering them a path toward redemption. Meanwhile, two competing proposals are being considered on Capitol Hill, and major foundations are funding programs to help youths in trouble.
Average Homicide Rate Per 100,000 (1995-2000)

- U.S.: 6
- Males: 9
- Black: 40
- Ages 17-29: 104
- St. Louis: 375
- E. St. Louis: 437

Decker, S. Youth Violence in St. Louis: Prospects for the Future. Criminology and Criminal Justice. UM-St. Louis
Racial Disparity in the St. Louis Region

Where We Stand: The Strategic Assessment of the St. Louis Region. East-West Gateway Council 2011
Ecological model showing shared risk factors for sub-types of interpersonal violence

**Individual**
- Victim of child maltreatment
- Psychological/personality disorder
- Alcohol/substance abuse
- History of violent behavior
- Poor parenting practices
- Marital discord
- Violent parental conflict
- Low socioeconomic household status
- Friends that engage in violence

**Relationship**
- Poverty
- High crime levels
- High residential mobility
- High unemployment
- Local illicit drug trade
- Weak institutional policies
- Inadequate victim care services

**Community**
- Situational factors
  - Rapid social change
  - Economic inequality
  - Gender inequality
  - Policies that increase inequalities
- Poverty
- Weak economic safety nets
- Poor rule of law
- Cultural norms that support violence
- High firearm availability
- Conflict/post conflict

**Societal**
Homeboy Industries serves at-risk and gang involved youth with a continuum of services and programs designed to meet their multiple needs, and runs four businesses that serve as job-training sites.

From a charter high school to tattoo removal to poetry classes and solar panel installation training, comprehensive services are offered to all who walk through Homeboy’s doors. After completing job-readiness programs, clients can be placed in one of our four businesses, where former rivals work side by side baking bread, learning to silkscreen, developing retail skills, or running a restaurant and catering business.
Infant Mortality Rates for Mothers Age 20+, by Race/Ethnicity and Education, 2005


Case 2
Wisconsin has the highest rate of infant mortality among African Americans in the country.
“Without a simple medical explanation, health officials say, the decline appears to support the theory that links infant mortality to the well-being of mothers from the time they were in the womb themselves, including physical and mental health; personal behaviors; exposure to stresses, like racism; and their social ties.”

New York Times, Friday November 27, 2009
Lesson Learned: Investment in early life may lead to profound savings in disease burden and expenditures in later life.

Diagram:
- **Preempt**: Lifelong diseases that begin during pregnancy and early life.
  - Pregnant mother
  - Fetus and neonate
- **Prevent**: Life span of disease burden and financial cost.
  - Infant
  - Child
  - Adolescent
  - Young adult
  - Older age

Life span
Infant mortality fight in Wisconsin gets $10 million boost

February 2009 the Wisconsin Partnership Program announced that it is committing $10 million over the next five years to fund projects designed to lower infant mortality in the state.

The initiative will look at racism, poverty, segregation, unemployment, inadequate housing, education, urban stress, teen pregnancy and even the sense of hopelessness pervasive in many African-American neighborhoods.

The steering committee consists of a cross section of people from the state's two medical schools, state and local officials, community organizations, health care systems, including Wheaton Franciscan Healthcare, Columbia St. Mary's and Aurora Health Care, and Milwaukee Health Services, which oversees two community health centers.

HIV Infection Rates/100,000 population

Case 3

2004 Report: City of St. Louis Department of Health
Health Literacy
An Overlooked Factor in Understanding HIV Health Disparities

Chandra Y. Osborn, PhD, Michael K. Paasche-Orlow, MD, MA, MPH, Terry C. Davis, PhD, Michael S. Wolf, PhD, MPH

Background: Limited health literacy may be a contributing factor to racial disparities in health care. This study examined the mediating effect of limited health literacy on the relationship between race and HIV-medication adherence.

Methods: A total of 204 patients infected with HIV were recruited from two clinics in 2001. Structured in-person interviews were conducted to obtain information on patient demographics, medication adherence, and health literacy. Multivariate regression models were run in 2006 to examine the associations among race, literacy, and HIV-medication adherence after adjusting for relevant covariates.

Results: In an adjusted analysis that excluded literacy, African Americans were 2.40 times more likely to be nonadherent to their HIV-medication regimen than whites (95% confidence interval [CI]=1.14–5.08). When literacy was included in the final model, the effect estimates of race diminished 25% to nonsignificance. Literacy remained a significant independent predictor of nonadherence (adjusted odds ratio [AOR]=2.12, 95% CI=1.93–2.32).

Conclusions: In this study, limited health literacy mediated the relationship between race and HIV-medication adherence. Investigators need to consider the potential utility of responding to literacy and communication barriers in health care as part of interventions to reduce racial disparities.


## Multivariate regression analysis for nonadherence to HIV-medications regimens, with and without literacy level

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AOR</td>
<td>95% CI</td>
<td>AOR</td>
<td>95% CI</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Black</td>
<td>2.40</td>
<td>1.14–5.08</td>
<td>1.80</td>
<td>0.51–5.85</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Male</td>
<td>0.94</td>
<td>0.84–2.01</td>
<td>0.97</td>
<td>0.80–1.18</td>
</tr>
<tr>
<td><strong>Age group</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
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</tr>
<tr>
<td>40–49</td>
<td>1.29</td>
<td>0.64–2.02</td>
<td>1.29</td>
<td>0.61–2.79</td>
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<tr>
<td>50</td>
<td>1.48</td>
<td>1.09–5.99</td>
<td>1.52</td>
<td>1.33–1.72</td>
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<tr>
<td><strong>Annual income</strong></td>
<td></td>
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<tr>
<td>$18,000</td>
<td>1.00</td>
<td>1.00</td>
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</tr>
<tr>
<td>$12,000–$17,999</td>
<td>2.26</td>
<td>1.20–1.53</td>
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<tr>
<td>$10,000–$11,999</td>
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<td>0.94–5.47</td>
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<tr>
<td>$10,000</td>
<td>0.42</td>
<td>0.19–0.93</td>
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<td>0.45–0.78</td>
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<tr>
<td><strong>Number of HIV medications in regimen</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1–2 medicines</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
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<tr>
<td>3 medicines</td>
<td>1.24</td>
<td>1.17–1.32</td>
<td>1.26</td>
<td>1.12–1.32</td>
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<tr>
<td><strong>Non-HIV comorbid condition</strong></td>
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</tr>
<tr>
<td>No</td>
<td>1.00</td>
<td>1.11</td>
<td>1.00</td>
<td>1.11</td>
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<tr>
<td>Yes</td>
<td>0.74</td>
<td>0.66–0.82</td>
<td>0.70</td>
<td>0.63–0.78</td>
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<tr>
<td><strong>Mental illness</strong></td>
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<tr>
<td>No prior treatment</td>
<td>1.00</td>
<td>1.00</td>
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<td>1.00</td>
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<tr>
<td>Treatment in past 6 months</td>
<td>1.31</td>
<td>0.68–2.47</td>
<td>1.11</td>
<td>0.66–2.59</td>
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Multivariate regression analysis for nonadherence to HIV-medication regimens, with and without literacy level cont’

<table>
<thead>
<tr>
<th>Literacy level</th>
<th>Model 1</th>
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<tr>
<td></td>
<td>AOR</td>
<td>95% CI</td>
<td>AOR</td>
<td>95% CI</td>
</tr>
<tr>
<td>9th grade (adequate)</td>
<td>–</td>
<td></td>
<td>1.00</td>
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</tr>
<tr>
<td>7th–8th grade (marginal)</td>
<td></td>
<td></td>
<td>1.55</td>
<td>0.93–2.45</td>
</tr>
<tr>
<td>6th grade (low)</td>
<td></td>
<td></td>
<td>2.12</td>
<td>1.93–2.32</td>
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<tr>
<td>Model fit (C statistic)</td>
<td>0.68</td>
<td></td>
<td>0.74</td>
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</table>

Results:

- Improved health literacy mediated medication adherence, however the study recognized that other factors were contributing to racial disparities.

- This is the first study to assess the impact of limited health literacy in explaining racial/ethnic differences in medication adherence among a sample of patients from both urban and rural settings.

- Strategies considered most effective in enhancing health literacy should adhere to an ecological framework, wherein program activities address the broader social determinants of health.

- *The implications are far reaching, in that health literacy, unlike race/ethnicity, is potentially modifiable.*
Moving forward: Conceptual framework and strategies to improve community health using the social determinants model
Healthy People 2020
A society in which all people live long, healthy lives

Overarching Goals:
- Attain high quality, longer lives free of preventable disease, disability, injury, and premature death.
- Achieve health equity, eliminate disparities, and improve the health of all groups.
- Create social and physical environments that promote good health for all.
- Promote quality of life, healthy development and healthy behaviors across all life stages.

http://healthypeople.gov/2020
Mechanisms and Intermediary Factors of Social Determinants of Health

Two kinds of policies are required to reduce premature death and eliminate health disparities:

1. Policies that impact income and wealth distribution, educational attainment and occupational mobility.
   - Educational policies
   - Fiscal policies
   - Skills training policies

2. Policies that buffer individuals from the damaging conditions of living below the top rungs of the socioeconomic ladder.
   - Policies affecting the environment
   - Policies affecting the workplace
   - Policies enabling healthier behaviors
Robert Wood Johnson Foundation Announces $300-Million Commitment to Narrow Health Disparities Across Lines of Race and Geography

Disparities in the quality of care spur nation's largest health care philanthropy to attack the problem in 14 communities across America
Conclusions

• Social determinants of health are mostly responsible for health inequities.

• Health planning should be based on an understanding that a patient’s entire life course affects the manifestation and perception of disease.

• Development of social determinants curricula and subsequent community health planning should draw on well-tested conceptual frameworks and evidence-based strategies.

• As a society we must be guided by stronger moral forces as we begin to develop comprehensive strategies to ameliorate health inequities.
We, Heads of Government, Ministers and government representatives, solemnly reaffirm our resolve to take action on social determinants of health to create vibrant, inclusive, equitable, economically productive and healthy societies, and to overcome national, regional and global challenges to sustainable development. We offer our solid support for these common objectives and our determination to achieve them.
“A just peace includes not only civil and political rights -- it must encompass economic security and opportunity. For true peace is not just freedom from fear, but freedom from want . . . the absence of hope can rot a society from within.”

President Barack Obama
Excerpted from his Nobel Prize Lecture, Oslo City Hall, Oslo Norway.
December 10, 2009
Full-time instructional faculty in degree-granting institutions, by race/ethnicity (2009)
Doctor’s degrees conferred by degree-granting institutions, by race/ethnicity (2008-2009)
Social Sciences

- White: 49%
- Black: 37%
- Hispanic: 5%
- Asian/Pacific Islander: 4%
- American Indian/Alaska Native: 4%
- Non Resident Alien: 1%
Statistical profile of persons receiving doctor’s degrees, by field of study and selected characteristics (2007-2008)

All Fields

- White: 76%
- Black: 8%
- Hispanic: 5%
- Asian: 7%
- American Indian/Alaska Native: 0%
- Two or more races: 2%
- Other and unknown: 2%
Number of degree-granting institutions conferring degrees, by degree and field of study (2008-2009)

Doctor’s Degree: Social Sciences

- Public: 70%
- Private: 30%
Acculturation
- MMC & VU
- Merging Cultures

Professional Development
- CHP

Acclimation
- VU Department

Networking
- CHP
- NAB
- National Scholars

Application of Sociology & Health Policy
- CHP
- Visiting Professors
- National Scholars
- Research Opportunities

Mentorship
- VU Minority Faculty
- Role Model
- Similar perspectives regarding research

Theories of Sociology

“The Big Picture”
"In order to improve the health outcomes of all Americans, it's important for the biomedical workforce to reflect the diversity of the population," said Donna Ginther, Ph.D., professor of economics at the University of Kansas. "As the population becomes increasingly diverse, we will continue to get further from that goal unless the community intervenes."
Purpose of this Funding

To establish a Center at Meharry Medical College that will contribute to the development and implementation of national health policies. The Center will become a national resource for the training of minority scholars in the field of health policy with a clear focus on doctoral training in the social science disciplines of Economics, Sociology, and Political Science.
Benefits of this Funding

• Transformative opportunity to deliver diversity in thought, culture and education to global health by providing health policy training to tomorrow’s healthcare leaders

• Semi-exclusive offering among academic centers in the United States – Meharry Medical College is one of two Robert Wood Johnson Foundation Centers for Health Policy in the country
Benefits of this Funding (cont.)

• Expanded educational opportunity for all MD, DDS, Ph.D. and especially the MSPH students attending Meharry Medical College

• Increase in number of faculty – specifically, those who will teach at the Meharry Medical College School of Graduate Studies and Research

• Allocation of funds to the endowment to ensure program sustainability
Benefits of this Funding (cont.)

• Allocation of operational funds in direct support of the Center for Health Policy

• Increase in direct and indirect funds allocated to facilities enhancements

• Opportunity to secure additional support - projected 10 year commitment
Mission

The mission of the Robert Wood Johnson Foundation Center for Health Policy at Meharry Medical College is to provide leadership in health policy education, research, and reform on national, state, and local levels that is congruent with the historic mission of Meharry Medical College, the nation’s oldest historically black medical school, to improve the health and healthcare of minority and underserved communities.
Goals

1) **Create leadership** at Meharry Medical College and Vanderbilt University via education and training who are committed to participating in health policy education, research, and reform specific to improving the health and healthcare of minority and underserved communities.

2) **Build research infrastructure** that provide the necessary resources to enable rigorous social science and policy research to be conducted through primary data collection, secondary data analysis, and geographic mapping.
Goals

3) **Conduct research** that examines, illuminates, and disseminates information on disparities in health that disproportionately impact minority and underserved communities and the related health policies that may mitigate or perpetuate these disparities.

4) **Develop policy expertise** regarding healthcare planning, healthcare resource allocation, health maintenance, health promotion and health programs, interventions, and strategies specific to health disparities in order to influence policy where appropriate.
The National Advisory Board

- **James F. Blumstein, M.A., L.L.B.**, University Professor of Law and Director, Vanderbilt Health Policy Center, Vanderbilt University Law School;

- **Timothy Carey, M.D., MPH**, Professor of Social Medicine and Director, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill;

- **Sheldon H. Danziger, Ph.D.**, Henry J. Meyer Distinguished University Professor of Public Policy and Director, National Poverty Center, Gerald R. Ford School of Public Policy, University of Michigan;

- **Honorable William H. Frist, M.D.**, Former United States Senator and Majority Leader;
The National Advisory Board

- Darrell J. Gaskin, Ph.D., Associate Professor of Health Economics, Johns Hopkins Bloomberg School of Public Health;

- James Jackson, Ph.D., Daniel Katz Distinguished University Professor of Psychology and Director, Institute for Social Research, University of Michigan;

- Thomas A. LaVeist, Ph.D., William C. and Nancy F. Richardson Professor in Health Policy and Director, Hopkins Center for Health Disparities Solutions, Johns Hopkins Bloomberg School of Public Health;

- Paula D. McClain, Ph.D., Professor of Political Science and Co-Director of the Center for the Study of Race, Ethnicity and Gender in the Social Sciences, Duke University;
The National Advisory Board

• Melvin Oliver, Ph.D., SAGE Sara Miller McCune Dean of Social Sciences, Professor of Sociology, University of California, Santa Barbara;

• Barbara Rimer, Dr.PH., Alumni Distinguished Professor and Dean, Gillings School of Global Public Health, University of North Carolina at Chapel Hill;

• Frank Sloan, Ph.D., J. Alexander McMahon Professor of Health Policy and Management, Professor of Economics and Director, Center for Health Policy, Law and Management, Duke University;

• Brian D. Smedley, Ph.D., Vice President and Director of the Health Policy Institute, Joint Center for Political and Economic Studies, Washington, DC.
For more information, please contact the RWJF Center for Health Policy at Meharry Medical College at 615.327.5503 or visit our website at www.meharryhealthpolicy.org

Thank You!
How the University of New Mexico SOM is Addressing Social Determinants of Health

Cynthia Arndell, MD
Associate Professor
Internal Medicine

Transformation Through Education

2011 ANNUAL MEETING
UNM Health Sciences Center

20/20 Vision: The new vision and core strategic goal for the UNMHSC

Working with our community partners, UNM Health Sciences Center will help New Mexico make more progress in health and health equity than any other state by 2020

Through Education, Service, Research, and Community Outreach
Current Recommendations From Key Leadership

AAMC

INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMIES

LCME
LIAISON COMMITTEE ON MEDICAL EDUCATION

AMERICAN MEDICAL ASSOCIATION

The Joint Commission

Carnegie Foundation for the Advancement of Teaching
An Interprofessional Collaboration

**SOM:**
- Multiple Divisions
- Teacher & Educational Development
- Program Evaluation
- Office of Diversity

**HSC:**
- Community Affairs
- HSC Library & Informatics Center
- College of Pharmacy
- College of Nursing

**Other UNM:**
- School of Law

**Community, City, State**
- Community Centers
- Police Department
- Public Schools
- Community Respite Shelters
- Healthcare for the Homeless
- NM Department of Health
Public Health Courses

Transcripted Courses
Health Equity: Principles of Public Health: 3 credits
Epidemiology/Biostatistics: 4 credits
Evidence-Based Practice: 2 credits

Fully Integrated Courses
Health systems and Health Policy
Community-Based Service-Learning Project
Ethics and Public Health
UNM SOM: Public Health Certificate

UNM Public Health Certificate: An Integral Part of the Medical School Curriculum

Epidemiology and Biostatistics
- Infectious disease
- Chronic disease
- Mortality
- Morbidity

Evidence-Based Practice
- Question Formulation
- Categorizing Questions
- Searching for High-Quality Evidence
- Critical Appraisal
- Decision Making

Community-Based Service-Learning Activities
- School-Based Health
- Health Commons
- Literacy and breastfeeding on the Zuni reservation
- Seroprevalence of HIV and Hepatitis B in prostitutes
- Unintended pregnancy prevention

Ethics and Public Health
- Socioecologic model
- Risk reduction: patients & populations
- Resource allocation

Principles of Public Health
Social Determinants of Health and Disease
- Lack of health insurance and access to healthcare
- Healthcare for the Homeless
- Community Health Centers
- Catholic Charities
- Samaritan Counseling
- Medicaid, UNM Care

Health Systems & Health Policy
- Advocacy
- Medicare
- Medicaid
- UNM Care
- Family Medical Home
- Indian Health Service
- Community Health Centers
- Prison Health

Special Populations
- Homeless
- Street Workers
- Undocumented immigrants
- HIV/AIDS
- Addicts
- Developmentally disabled
- Frail elderly
- Special needs children
- Prisoners
Health Equity: Introduction to Principles of Public Health

Reuniting Medicine and Public Health
Overarching Goals

1) Introduce the socioecological model of health

2) Lay the groundwork for public health concepts
Teaching/Learning Activities
Evaluation Tools and Curricular Outcomes

Direct feedback
Pre and post surveys
Medical Student Attitudes Toward Underserved Survey (MSATU)
Performance-based skill stations
Assessment of post-graduate practices


The Health Equity Circle
Student led education in the social determinants of health

Luis Manriquez
lmanriquez@gmail.com
360-395-5825
Renal risk and renoprotection among ethnic groups with type 2 diabetic nephropathy: A post hoc analysis of RENAAL
Kidney Int. 2006 May;69(9):1675-82.

**Figure 1** | Distribution of baseline albuminuria stratified by ethnic group. Each box represents albuminuria levels by quantiles. The lowest and highest boundaries below and above each box represent the 10th and 90th% quantiles, respectively. The bottom, middle, and top of each box represent the 25th, 50th, and 75th% quantiles, respectively.

**Figure 2** | Event rate of ESRD stratified by ethnic group. The cumulative proportion (%) of patients in each ethnic group that reached ESRD was estimated using the Kaplan-Meier procedure.
“Washing one's hands of the conflict between the powerful and the powerless means to side with the powerful, not to be neutral.”

-Paulo Freire

healthequitycircle.org
“Washing one's hands of the conflict between the powerful and the powerless means to side with the powerful, not to be neutral.”

-Paulo Freire

healthequitycircle.org
"Precisely because it is impossible for education to be neutral, educators have to confront some practical problems. A biology teacher must know biology, but is it possible just to teach biology? What I want to know is whether it's possible to teach biology without discussing social conditions, you see.

healthequitycircle.org
Is it possible to discuss, to study the phenomenon of life without discussing exploitation, domination, freedom, democracy and so on? I think that it's impossible but I am also sure that if I am a teacher of biology, I must teach biology.”

-Paulo Freire

healthequitycircle.org
“Education either functions as an instrument which is used to facilitate integration of the younger generation into the logic of the present system and bring about conformity or it becomes the practice of freedom, the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world.”

-Paulo Freire

healthequitycircle.org
GSA Reception

• Buses will depart from the main entrance of Hyatt Regency Hotel at 5:30pm. Buses will depart once they are full.

• Reception is from 6pm-8pm

• Buses will return from the University of Colorado School of Medicine starting at 7:30pm

• Tickets are not required to attend!!!

• Address of the Reception:
  12700 E. 19th Ave
  RC2 Building
  Aurora, CO 80045