PATIENT NAVIGATION
and
ITS IMPACT ON HEALTH DISPARITIES

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Navigation Seminar, Sept 23rd 2014
OBJECTIVES

• Describe legal, conceptual and operational models to address cancer disparities and the role of navigators within these models.

• Discuss evidence based integrative approaches to eliminating health disparities

• Describe NIH-funded local and regional programs in the Mid-South to address molecular and social determinants, training, access to clinical trials, and the role of navigators within these programs.
Historical and Legislative Landmarks

HHS Secretary’s Task Force on Black and Minority Health of 1985

The NIH Revitalization Act of 1993, Public Law (P.L.) 103-43

The Minority Health and Health Disparities Research and Education Act of 2000, Public Law (P.L.) 106-525

The Affordable Care Act of 2010
National Partnership for Action to End Health Disparities for Ethnic and Racial Minority Populations (NPA)

[Image: NIMHD Logo]

[Image: National Cancer Institute Logo]

[Image: CRCHD Logo]
The Affordable Care Act and Patient Navigation

- ACA Section 3510 reauthorizes Sect 340a of the PHSA, the **Patient Navigation** and Chronic Disease Prevention grants,

- The law contains provisions that open opportunities and challenges for addressing health disparities, and disparities in cancer care.

- The law contains many provisions recognizing the important role of community-based organizations and health initiatives in preventing chronic disease and linking the public to health care services.

- Operationally, navigators under the ACA focus on 1. helping individual patients with access to care, 2. navigate patients with specific conditions, and 3. navigate patients to specific points when services are complete.
The Legal Definition of HD

“A population is a health disparity population if there is a significant disparity in the overall rate of disease incidence, prevalence, morbidity, mortality or survival rates in the population as compared to the health status of the general population.”

The Minority Health and Health Disparities Research and Education Act of 2000, Public Law (P.L.) 106-525
Also mandated the creation of the NIH/NIMHD
NCI definition

The NCI defines "cancer health disparities" as "differences in the incidence, prevalence, mortality, and burden of cancer and related adverse health conditions that exist among specific population groups in the United States."
INCIDENCE OF ALL CANCERS

19 age groups - Census P25-1130
Percentage of adults 19-64 with any chronic disease or disability by poverty level

Even at higher incomes blacks are more likely to suffer from a chronic condition or disability than whites and Hispanics

INCIDENCE OF MAJOR CANCERS

19 age groups - Census P25-1130
Black male are 50% more likely to have prostate cancer than whites but are more than twice as likely to die from it.

Source: National Center for Health Statistics, 2006
DISPARITIES IN THE TREATMENT OF EARLY STAGE LUNG CANCER

Rate of Surgery

- WHITE: 76.6%
- BLACK: 64%

5 yr Survival Rate

- WHITE: 34.9%
- BLACK: 26.4%

SOCIAL DETERMINANTS OF HEALTH MODEL

CHRONIC DISEASES

48% of African Americans VS. 39% of the general population

DIABETES

8% of White Americans, 14% of Hispanics, 15% of AA, 18% of American Indians

OBESITY

AA are 15% more likely to be obese than whites, Hispanics are 1/3 less likely to receive counseling than whites

ACCESS TO CARE

40% of low-income Americans do not have health insurance vs. 6% of high-income Americans

Source: U.S. Health and Human Services (Secretary Kathleen Sebelius, June, 2009)
HISTORICAL EVOLUTION IN NEW ORLEANS

Latino Healthcare Access Network: Daughters of Charity Clinic, Charity Hospital, Catholic Charities / Hispanic Apostolate, HAMAL, LPHI, and Baptist Community Ministries
In hospital and community-based Promotoras de Salud

PATIENT NAVIGATION

• Problem-solving
• Sharing information
• Coordinating appointments
• Finding resources
• Locating appropriate services
• Helping with paperwork
• Coordinating with healthcare team
• Providing support.
ATEMPTS AT DEFINING & ADAPTING THE APROPRIATE MODEL
GREATER NEW ORLEANS PATIENT NAVIGATION NETWORK
(based on the Freeman’s model)

The “medical model” of prevention, diagnosis and care (pros and cons)
SOCIO ECONOMIC STATUS AND INFLAMMATION

## Differential distribution SNPs between African American and Caucasian newborns

<table>
<thead>
<tr>
<th>Genotypes and Alleles</th>
<th>Ethnic group (n=593)</th>
<th>Two-sided p value</th>
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<tbody>
<tr>
<td></td>
<td>Caucasians (n=299)</td>
<td>African Americans (n=294)</td>
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<tr>
<td><strong>IL1B-511 T</strong></td>
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<tr>
<td><strong>TNF-308A</strong></td>
<td>32.9</td>
<td>24.9</td>
</tr>
</tbody>
</table>

A two-way gene–gene interaction is associated with the risk of PCa in African-Americans

Two two-way gene–gene interactions are associated with PCa risk in Caucasians

IL1β
AA
CAUCASIANS
GI Cancer

TNFα
CAUCASIANS
Aggressive PCa

IL8
Obesity
CAUCASIANS

GENES
SINGLE NUCLEOTIDE POLYMORPHISM
SNPs

J. Zabaleta
Carcinogenesis, 30(8) 1358-1362, 2009
& unpublished data
S. Koochekpour
Androgen Receptor Signaling and Mutation in Prostate Cancer
Asian J Andrology, 12:639-657, 2010
___High school, GED, less education; ..... Some college; - - - - Bachelors degree or higher
Breast Cancer in Latinas: From Abnormal Screening to Diagnosis

Six Cities PN Study: San Francisco, San Diego, New York City, Miami, Houston, and San Antonio

Kaplan-Meier time-to-diagnosis comparison, navigated versus control subjects, overall and stratified by BI-RADS. Censored at 180 days. Timely diagnosis in navigated group: within 30 days: 67.3% vs 57.7%; $P = .045$; within 60 days: 86.2% vs 78.4%; $P = .023$). This was driven by the BI-RADS-3 strata (within 30 days: 83.6% vs 50%; $P < .001$; within 60 days: 94.5% vs 67.2%; $P < .001$). A lack of missed appointments was associated with timely diagnosis.

Breast Cancer Survivorship: Health related quality of life (HRQOL) 
Quantifying Social Determinants 
Biopsychosocial / Ecological Models
Breast Cancer Survivorship: Health related quality of life (HRQOL)
Biopsychosocial / Ecological Models

**Rationale**
Low HRQOL in Latina Survivors
Dearth of research: community factors, Institutional factors, and policy-level factors: health care access, legal and immigration, physical and built environments, health care affordability, and policies affecting Latina breast cancer survivors’ HRQOL

Current Status of Research on HD

Politics, more informed Congress, public, HHS/NIH priorities, trends in funding, etc

SOCIO-ECONOMIC  HEALTH-BEHAVIORAL  MOLECULAR-GENETIC
CHRONIC INFLAMMATION AND CANCER DISPARITIES

Dillard-LSUHSC Minority Health & Health Disparities Research Center
Mid-South Transcolaborative Center for HD Research

**GENETIC FACTORS**

- miRNA
- SELECTIVE GENE EXPRESSION
- IMMUNE RESPONSE
- INFECTION
- INJURY
- DNA REPAIR

**CHRONIC INFLAMMATION**

**SOCIO ECONOMIC FACTORS**

**RESEARCH**

(A. Ochoa, J. Estrada, W. Jones)

- **Genetics & Prostate Cancer**
  - E. Buckles, W. Liu

- **Inflammation and Obesity**
  - J. Zabaleta, Y. Powell-Young
  - M. Sothern, J. Basu-Ray, J. Estrada

- **HPV, EVB & Cervical Cancer**
  - C. Hurst, M. Hagensee

- **DWH Oil Spill – DNA Damage and Repair**
  - K. Reiss, Singleton

- **HIV/AIDS Malignancies**
  - C. Parsons, F. Peruzzi, T. Reske
INCREASING MINORITY PARTICIPATION IN CLINICAL RESEARCH

Minority Health & Health Disparities Research at LSUHSC

TRAINING

• Minority nurses to become certified CRAs - 31 nurses trained (target = 20)
  C. Hurst; B. Dennis; J. Estrada
• Minority students to become cancer researchers – 8 trained (target = 20)
  J. Estrada; J. Wilson

Gulf-South Minority-Based Community Oncology Research Program (GS-NCORP)

PREVENTION/TREATMENT TRIALS, COMMUNITY ENGAGEMENT & TRAINING

• Minority nurses,
• Undergraduate students,
• Medical students

TRAINING SITES: Dillard, LSUHSC, EKL, Chaubert, Ochsner, MBP, Pennington, Gulfport Memorial
INCREASING MINORITY PARTICIPATION IN CLINICAL RESEARCH
Minority Health & Health Disparities Research

COMMUNITY ENGAGEMENT
Models: CBPR and Community-Academic Partnerships

• Determining Barriers to participation (communities, patients, physicians)

• Researching believes and attitudes about participation (individuals and communities)

• Lower 9th Ward Strategic Plan for Community Wellness

• Community-academic partnerships: Ninth Ward and Gentilly
CANCER HEALTH DISPARITIES & NAVIGATION

• Access to Care and Delivery of Care (CCDR)

• Screening / Early Detection

• Treatment & Access to Clinical Trials

• Racial and Ethnic Differences in Presentation & Response to Treatment

2. Quality of Life among Immigrant Latina Breast Cancer Survivors: Realities of Culture and Enhancing Cancer Care. Maria Lopez-Class (Lombardi Cancer Ctr)


5. Bibliography from researchers at LSUHSC