Advancing the Health of Latino Communities:
A program of Health Disparities Research

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Objectives

- Discuss challenges and opportunities in health disparities research
- Discuss a program of research in HIV prevention with Latino women
Health Disparities

“The future health of the nation will be determined to a large extent by how effectively we work with communities to reduce and eliminate health disparities between non-minority and minority populations experiencing disproportionate burdens of disease, disability, and premature death.”

~ CDC, Office of Minority Health (2006)
Health Disparities: Multiple Lenses

**By Disease**
- Cancer
- Cardiovascular disease
- HIV/AIDS
- Diabetes
- Hepatitis
- Mental illness
- Oral health disorders

**By Population**
- Race/ethnicity
- Socioeconomic position
- Gender
- Disability
- Sexual orientation

**By Risk Factor**
- Substance abuse (including tobacco)
- Diet and weight
- Vaccination status
- Screening status
- Access to care
- Insurance status
- Risk of injury/violence
- Environmental risk
- Sexual behavior
- Physical inactivity

**By Geography**
- Urban versus rural
- Developed versus developing countries
- Neighborhood segregation

Multiple and overlapping lenses for viewing health disparities (Koh et al., 2010; IOM, 2012)
Health Disparities

Communities of opportunity versus low-income communities

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

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

Good Health Status

Poor Health Status
Contributes to health disparities:
- Obesity
- Diabetes
- Asthma
- Infant mortality

Thompson, 2010; IOM, 2012
## Health Disparities in the U.S.

### Healthy People 2010

**Leading Health Indicators**
- Access to health care
- Environmental quality
- Immunization
- Injury and violence
- Mental health
- Overweight and obesity
- Physical activity
- Responsible sexual behavior
- Substance abuse
- Tobacco Use

### Results

- No significant change in disparities has occurred for at least 70 percent of the health indicator objectives (Sondik and Colleagues, 2010).

Institute of Medicine, 2012
Health Disparities in the U.S.

Some Examples of Health Disparities

• Adults age 65 and over received worse care than adults ages 18-44
• African American received worse care than Whites
• Hispanics received worse care than non-Hispanic Whites
• African American and Hispanic families are more likely to be living in a community with high concentrations of poverty
• Other examples: life expectancy, rates of mortality from heart disease and diabetes, maternal health, HIV infection

Health Disparities in the U.S.

Examples of Health Disparities: Life Expectancy

- The disparity in life expectancy has persisted over the decades

Life expectancy 1960-2000

Arias, 2002; IOM, 2012
Health Disparities in the U.S.

Migration

• Immigrants of all racial and ethnic groups have better health outcomes than their counterparts born in the United States

• Unfortunately, the longer that an immigrant remains in the United States, the worse his or her health becomes, and this could be related with different factors:
  – Access to health coverage
  – Lack of support systems
  – Lack of knowledge about the health system
  – Language and cultural barriers

IOM, 2012; NextGen, 2011
Center of Excellence for Health Disparities Research: El Centro

**Health Foci:**
- HIV and other sexually transmitted infections
- Substance abuse
- Family and intimate partner violence
- Associated mental and physical health conditions

**Populations:**
- Hispanics and Blacks (African American and Caribbean)
- Sexual minority groups

**Themes and Approaches:**
- Development, evaluation and dissemination of culturally-tailored interventions
- Addressing culturally-related factors impacting multiple health conditions
- Culturally-informed, community-engaged methods
- Training and mentoring the next generation of health disparities researchers
- Interdisciplinary team science
El Centro Specific Aims

**Aim 1.** Provide leadership and an organizational structure and support system for minority health and health disparities research, training and dissemination.

**Aim 2.** Conduct rigorous research to test the outcome, translation, mechanisms and moderators of culturally-tailored interventions, and advance health disparities research methodologies.

**Aim 3.** Increase the pipeline of well-prepared, culturally-competent and ethically responsible health disparities researchers, especially individuals from minority and other health disparities populations.

**Aim 4.** Establish and strengthen academic-community partnerships that promote the utilization of research-based practices to improve the well-being of health disparities communities and to conduct original and innovative research leading to improvements in minority health and the elimination of health disparities.
El Centro Structure: Four Integrated Cores
Scientific Advisory Board

Administrative Core
Nilda Peragallo, DrPH, RN, FAAN
Principal Investigator
Victoria Mitrani, Ph.D
Co-Principal Investigator
Marina Alvarez, B.S.
Administrative Core Assistant Director
Cristian Ruiz, B.A.
Core Coordinator

Research Core
Victoria Mitrani, Ph.D
Core Director
Joanne O’Day, M.A.
Core Coordinator

Research Training and Education Core (R-TEC)
Rosa Gonzalez-Guarda, Ph.D
Guerda Nicolas, Ph.D
Core Co-Directors
Mickey Havrilesko, MsEd
Core Coordinator

Community Engagement, Dissemination and Implementation Core (CEDI)
Daniel Santisteban, Ph.D
Core Director
Angel Llor, M.A.
Core Coordinator

Associated Faculty

Steering Committee
Aim 1. Serve as a research infrastructure platform that advances the rigor, innovation and impact of HD research through the support, guidance, and regulatory oversight of El Centro studies.

Aim 2. Serve as a resource to investigators, locally, nationally and internationally regarding HD research.

Aim 3. Serve as an incubator that facilitates and nurtures the development of programs of HD research and contributes to the success of emerging HD investigators.

Aim 4. Identify and utilize innovative research and analytic methods to enhance HD research.
Current Activities of the Research Core

Aim 1: Infrastructure Platform for El Centro Studies/Core Studies Update

- CIFFTA-P
- SEPA III
- SET-R
- Joven

Aim 2: Methodology Resources/Measures Library

- Locating original measures and authors
- Locating translations for measures (Spanish)
- Identifying methods of translation
- Publication updates and NIH Public Access compliance
Current Activities of the Research Core

Aim 3: Incubator/Grant Proposal Development Assistance & Internal Review
- SONHS Research Central on Blackboard
- Research Grant Proposal Timeline (6 months)

Aim 4: Research and analytic methods
- Strengthening the capacity of our analysis team
A program of Health Disparities Research with Latina Women

**HIV Prevention**

- Hispanic women in the U.S.

**Dissemination of SEPA to other settings/populations**

- SEPA intervention for Hispanic women 18-50 years old in the U.S. (PI Peragallo)
  - SEPA I (Chicago)
  - SEPA II (South Florida)
  - SEPA III (Translational Research, Partnership with the FDOH)

**Related Research:**

- Project DIVA (PI Drs. Peragallo and Gonzalez-Guarda)
- Project VIDA (PI Drs. Vasquez, De Santis and Gonzalez-Guarda)

- SEPA-O intervention for Older Hispanic women (PI Dr. Cianelli)

- I-STIPI Web based intervention for young Chilean women (PI Dr. Villegas)

- Mano a Mano intervention for Chilean population (women, men, health care workers) (PI Drs. Cianelli and Ferrer)
HIV Prevention: Project SEPA
SEPA is a culturally-specific HIV risk reduction intervention
Theoretical Foundations

• The social-cognitive model of behavioral change (Bandura, 1977) for the content and activities of the intervention.

• Freire's (1970) pedagogy for the delivery and contextual tailoring of the intervention.

• The World Health Organization’s Primary Health Care model (WHO, 1978).
SEPA

Random Group Assignment

Personal Factors

Intervention Experiences

Intermediate Outcomes

HIV/AIDS Prevention Outcomes

Relationship Factors
HIV and Hispanic Women

- Women are disproportionately at risk for the acquisition of HIV infection due to a combination of biological, social and environmental factors that may present challenges to safer sexual practices.

- Among Hispanic women:
  - Poverty and unemployment
  - High risk sexual partners
  - Cultural barriers to discuss sexual matters
  - Traditional gender roles (i.e. *machismo* and *marianismo*) that promote inequitable gender norms and roles that make it difficult for women to negotiate safer sexual practices
  - Access to healthcare
  - Language barriers

HIV Risk Reduction among Latina women in the U.S.

<table>
<thead>
<tr>
<th>SEPA I Project</th>
<th>DYVA Project</th>
<th>SEPA II Project</th>
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<tbody>
<tr>
<td><strong>Salud/Health</strong></td>
<td><strong>Drogas/Drugs</strong></td>
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<td><strong>Y/and</strong></td>
<td><strong>Educación/Education</strong></td>
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<td><strong>Prevención/Prevention</strong></td>
<td><strong>Violencia en las/Violence in the Americas</strong></td>
<td><strong>Prevención/Prevention</strong></td>
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<td><strong>Autocuidado/Self-Care</strong></td>
<td><strong>Multicentric Pilot Project</strong></td>
<td><strong>Autocuidado/Self-Care</strong></td>
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<td>Funded by NIH / NINR R01 NR04746</td>
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**SEPA III The Effectiveness Trial: Translational Research**

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<td>Autocuidado/Self-Care</td>
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<td>Project</td>
<td>Objectives</td>
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<tr>
<td>Project SEPA</td>
<td>Evaluate a randomized culturally-tailored intervention to prevent high-HIV-risk sexual behaviors for Mexican and Puerto Rican women living in urban areas.</td>
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<tr>
<td>Project DYVA</td>
<td>Explore the collective and individual experiences of Latinas with substance abuse, violence and risky sexual behaviors.</td>
</tr>
<tr>
<td>Project SEPA II</td>
<td>Evaluate the effectiveness of a culturally-tailored specific intervention to increase HIV prevention behaviors for Hispanic women living in South Florida.</td>
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<tr>
<td>Project SEPA III</td>
<td>To evaluate the effectiveness of SEPA to increase HIV prevention behaviors and to reduce the incidence of STIs for Hispanic women when delivered in a real world setting by community agency personnel.</td>
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</table>
SEPA II
Methods and Results
Methods

Design

SEPA II is a randomized trial.

Sample

- 548 Hispanic women residing in South Florida between 18 and 50 years old and sexually active in the last 3 months participated in the study:
  - 274 were assigned to the intervention group
  - 274 to the delayed intervention control group
Methods

General Characteristics of the Intervention

• SEPA II has five group sessions of two hours each. Each group had approximately 8-10 participants, a facilitator and co-facilitator. There were Spanish and English groups.

• SEPA II sessions focus on the following contents:
  – Knowing your body
  – Risk awareness/management
  – Skill training on condom use
  – Sexual communication/negotiation and problem solving
  – Violence prevention/conflict management

<table>
<thead>
<tr>
<th>SEPA Sessions</th>
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<tr>
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<td>4</td>
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<td>5</td>
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</table>
Methods

Data Collection

• Participants were recruited from: personal contact at public places such as community centers, fliers, and referrals from women in the study

• Participants were assessed by female bilingual interviewers using a structured questionnaire at baseline and 3-months, 6-months, and 12-months post-baseline

• The interviews were conducted in offices at or near a community service agency. Assessments were collected with the assistance of a web-based research management software system (e-Velos)
Methods: Measures

Behavioral

• Condom use
• Intimate Partner Violence (Revised Conflict Tactic Scale short form) $\alpha = .87$
• Got drunk

Social Cognitive and Community Prevention

• Partner communication (Catania, 1995) $\alpha = .89$
• Perceived HIV risk
• Self efficacy for HIV/AIDS $\alpha = .75$
• HIV related Knowledge (Heckman et al., 1996) $\alpha = .75$
• Safer sex peer norms (Sikkema et al. 1996) $\alpha = .80$
• Perceived Barriers to condom use (Sikkema et al. 1996) $\alpha = .58$
• Behavioral Intentions to use condoms (Sikkema et al. 1996) $\alpha = .87$
• Community Prevention (Peragallo et al., 2005)
• Depression (CES-D) $\alpha = .94$
• Bidimensional Acculturation Scale (Marin & Gamba, 1996), $\alpha = .85$ and $.95$ for Hispanicism and Americanism subscales respectively.
Methods

Data Analysis

• Data were analyzed using:
  • Descriptive Statistics
  • Outcome hypothesis were tested in a separate intent-to-treat (ITT) Generalized Estimating Equations (GEE).
  • The software PASW17.0 was used to analyze the data

Ethical Aspects

• This study was approved by the University of Miami and the Florida Department of Health IRBs
## Sample Characteristics

<table>
<thead>
<tr>
<th>Descriptive variables</th>
<th>Control (n = 274)</th>
<th>SEPA (n = 274)</th>
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<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Age (years)</td>
<td>38.22</td>
<td>8.73</td>
</tr>
<tr>
<td>Education (years)</td>
<td>13.11</td>
<td>3.51</td>
</tr>
<tr>
<td>Years living in the U.S.</td>
<td>10.99</td>
<td>9.88</td>
</tr>
<tr>
<td>Acculturation (Americanism)</td>
<td>2.32</td>
<td>0.80</td>
</tr>
<tr>
<td>Acculturation (Hispanic Values)</td>
<td>3.55</td>
<td>0.44</td>
</tr>
<tr>
<td>Number of sexual partners (Last 3 months)</td>
<td>1.08</td>
<td>0.45</td>
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</tbody>
</table>
## Sample Characteristics

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<tr>
<td></td>
<td>M</td>
<td>%</td>
<td>M</td>
<td>%</td>
</tr>
<tr>
<td>Employed</td>
<td>88</td>
<td>32</td>
<td>92</td>
<td>34</td>
</tr>
<tr>
<td>Monthly income &lt; $2000/month</td>
<td>185</td>
<td>68</td>
<td>196</td>
<td>72</td>
</tr>
<tr>
<td>Born outside of U.S.</td>
<td>251</td>
<td>92</td>
<td>256</td>
<td>93</td>
</tr>
<tr>
<td>Living with partner</td>
<td>199</td>
<td>73</td>
<td>181</td>
<td>66</td>
</tr>
<tr>
<td>Has health insurance</td>
<td>114</td>
<td>42</td>
<td>92</td>
<td>34</td>
</tr>
</tbody>
</table>
Estimated trajectory of Condom Use (any) from GEE intent-to-treat analysis comparing intervention and control group

$B = 0.18$, $SE = 0.06$, $p < .001$, 95%CI [0.08, 0.19]
Estimated trajectory of Partner Violence from GEE intent-to-treat analysis comparing intervention and control group

$B = -0.17$, $SE = 0.06$, $p < .01$, $95\% CI [-0.29, -0.05]$
Estimated trajectory of Communication with Partner from GEE intent-to-treat analysis comparing intervention and control group

Linear: $B = 0.46$, $SE = 0.20$, $p < .05$, 95%CI [0.06, 0.86]

Quadratic: $B = -0.09$, $SE = 0.05$, $p = .06$, 95%CI [-0.18, 0.00]
Estimated trajectory of HIV Knowledge (90% correct) from GEE intent-to-treat analysis comparing intervention and control group

Linear: $B = 0.58$, $SE = 0.20$, $p < .01$, 95%CI [0.20, 0.97]

Quadratic: $B = -0.14$, $SE = 0.05$, $p < .01$, 95%CI [-0.23, -0.05]
Estimated trajectory of Behavioral Intentions from GEE intent-to-treat analysis comparing intervention and control

Risk Reduction Behavioral Intention (> 13)

Baseline 3 months 6 months 9 months 12 months

Linear: $B = 0.43$, $SE = 0.22$, $p < .05$, $95\% CI [0.01, 0.86]$

Quadratic: $B = -0.11$, $SE = 0.05$, $p < .05$, $95\% CI [-0.22, -0.01]$
Conclusions & Implications

• SEPA was effective in reducing HIV risk among Hispanic women and its results should be disseminated to community-based organizations for wide-scale use.

• This study provided evidence that HIV/AIDS prevention interventions must be developed in the community and culturally tailored to the targeted population of the intended program.

• Strong referral system established (e.g., mental health, domestic violence, housing).
SEPA III: The Effectiveness Trial

- To evaluate the effectiveness of SEPA to increase HIV prevention behaviors and to reduce the incidence of STIs for Hispanic women when delivered in a real world setting by community agency personnel.

- To establish a novel and effective partnership to improve minority health by integrating the SEPA intervention into the community setting while assessing:
  - Agency and facilitator characteristics
  - Readiness for practice improvement
  - Implementation
  - Fidelity and sustainability
Method

• **Design:** SEPA III is an experimental study (5 years).

• **Sample:** 300 Hispanic women, residing in South Florida between 18 and 50 years old and sexually active in the last 3 months.
  • 150 will be assigned to the intervention group
  • 150 will be assigned to a delayed intervention control group

• **Translational Research**
  – SEPA will be implemented in a **real work setting**: Partnership with MDHD.

• **Study Measures (baseline, 6 months and 12 months)**
  – Behavioral and Socio Cognitive
  – Biological (HIV, gonorrhea, chlamydia and trichomona)
Design of SEPA III Study

SEPA Research Team
- Research assessments
- Fidelity
- Training
- Readiness evaluation

Partnership

Community Agency Personnel
- Recruit and retain participants
- Implement and deliver SEPA
Progress and Challenges

• Partnership (processes within/between the institutions)
• Locations
• Hiring process
• Measurements
• Testing
Dissemination of SEPA to other settings/populations

- Mano a Mano intervention for Chilean population (women, men, health care workers)
- I–STIPI Web based intervention for young Chilean women
- SEPA-O intervention for Older Hispanic women
SEPA Evidence Base for HIV Prevention in Latino Women: Mano a Mano intervention for Chilean population

**SEPA**

**Health Care Workers**
NIH R03 TW 006980-3 (PI: Norr/Cianelli)

**Mano a Mano**
Chilean Women
NIH Grant R01 TW007674-05 (PI: Cianelli)

**Mano a Mano**
Chilean Men
NIH Grant R01 TW007674-03 (PI: Ferrer)

**Indigenous Mapuches**
Chile (FOGARTY)

**Nursing Students**
(DIPUC) PI: Ferrer

**Training to primary health care workers**
**I-STIPI web based intervention and SEPA –O: Adaption of SEPA for Younger and Older Hispanic Women**

**SEPA-**
- Salud/Health
- Educación/Education
- Prevención/Prevention
- Autocuidado/Self-Care

Funded by NIH/NCMHD
1P60MD002266
P.I. Peragallo

**I-STIPI**
- Internet Based
- Sexualy
- Transmitted
- Infections and HIV
- Prevention
- Intervention for young Chilean women

Setting
Santiago, Chile.

**SEPA-O**
- Salud/Health
- Educación/Education
- Prevención/Prevention
- Autocuidado/Self-Care
- Older Hispanic women

Setting
Miami, Florida
Results

HIV Risk Knowledge

SEPA Mano a Mano (Chile)
Results

Risk Reduction Behavioral Intentions

SEPA  Mano a Mano (Chile)
Results
HIV Prevention Related Outcomes

I-STIPI

The I-STIPI resulted in a significant increase in young women’s levels of STI and HIV related:

• Knowledge
• Attitudes toward the use of condoms
• Perceived self efficacy
• Preventive behaviors related with the reduction of the number of sexual partners and risky sexual behaviors with uncommitted partners.

SEPA-O

• None of the OHW reported the use condoms regularly
• The majority reported that they suspect partners’ have other sexual partners outside of their relationship.
• OHW reported depressive symptoms.
• Topics that that OHW would like to discuss were changes related to menopause (78%) how HIV affects OHW (72%) and diseases prevention.
Conclusions & Implications

• The adaptation of SEPA was effective to ensure that I-STIPI and SEPA-O addressed unique participants characteristics and needs.

• The inclusion of panels of experts and women in the development in the adaptation of SEPA was relevant to ensure that these interventions maintain the core elements and the efficacy of this intervention.

• This study provided evidence that HIV/AIDS prevention interventions must be developed in the community and culturally tailored to the targeted population of the intended program.
Health Disparities

Challenges to Advancing the Health Equity Agenda

• Effects of the current economic downturn

• Persistence of institutional inequalities and racial discrimination

• Tendency to ignore environmental influences on individuals behavior and focusing on the individual or personal responsibility

Braveman, 2006; National Healthcare Quality Report, 2011
References


References


