Expanding Opportunities in Health Disparities Research

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University of Miami
School of Nursing and Health Studies

National Institute of Nursing Research
20th Anniversary
October 11, 2006
Objectives

• Discuss program of research on HIV with health disparities populations

• Analyze future opportunities and challenges in health disparities research
“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

Differences in the incidence, prevalence, mortality, and burden of disease and other adverse health conditions that exist among specific population groups in the U.S.

NIH Work Group on Health Disparities

Racial and ethnic differences in the quality of healthcare that are not due to access-related factors or clinical needs, preferences, and appropriateness of the intervention.

Institute of Medicine

How Big is the Problem?

Conditions that disproportionately affect racial/ethnic minority groups:

- Cardiovascular Disease
- Cancer
- Infant Mortality
- Diabetes
- Lack of Immunization
- HIV/AIDS
Women at Increased Risk of HIV

Percentage of total new AIDS diagnoses:
- In 1985, 8% were female
- In 2003, 27% were female

Percentage of new AIDS diagnoses among heterosexual women:
- 67% African American
- 16% Latina
- 14% White

HIV/AIDS Rates in the Latino Community

In 2003 Latinos comprised:
- 14% of the population
- 20% of new HIV diagnoses

Between 1999 and 2003 new AIDS diagnoses demonstrated an:
- 8% increase among Latinos
- 3% decrease among Whites

Program of Research:
A Community and Culturally-Based Intervention Model for Latinos

Random Survey on Attitudes of RNs towards AIDS Patients

In Depth Semi-structured Interviews to AIDS patients
A nursing intervention to prevent AIDS in Chile
Funded by NIH/USAID Family Health International (1990-1992) N=44

Survey HIV Testing Sites
(1990-1992)
Funded by NIH/USAID Family Health International

Instrument Re-Testing HIV Risks among Latinas
(1995)
Funded by UIC, college of nursing, Research Fund N=30

Structured Interviews HIV/AIDS Risk reduction for Latinas
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In Depth Interviews
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Group intervention
Community Outreach Model: Women’s Health Program with Latinas
(1999-2000) Funded by Procter & Gamble N=180

Survey
Breast cancer and cervical screening practices among minority women

Drugs & Violence in the Americas: DYVA
Multicentric Pilot Study Funded by CICAD/OAS (2006-07) N=90

Focus groups
HIV/AIDS Risk reduction for Latinas
(1997-1998)
Funded by UIC/Great Cities Faculty Research fund

Pilot Testing
HIV/AIDS Risk reduction Intervention: SEPA
(1997-1998)
Funded by UIC/Great Cities Faculty Research fund

Randomized Trial
HIV/AIDS Risk reduction Program: SEPA
Funded by NIH/NINR # R01 NR0476 N=768

Descriptive study
Breast cancer screening practices in Mexican and Puerto Rican Women

Descriptive study
Cervical cancer screening practices in Mexican and Puerto Rican Women

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Estimated Number of Persons Living with HIV/AIDS, December, 2004

Global Total: ~39.4 million

Source: UNAIDS, 12/2004
Factors that Increase HIV Risk for Latinas

• Unequal access to health care
• Language barriers
• Cultural characteristics
  - Gender roles, “machismo” and “marianismo”
  - Conceptualization of male sexual roles
  - Religiosity

# HIV Risk Reduction in Latino Communities

<table>
<thead>
<tr>
<th>SEPA Project</th>
<th>DYVA Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salud/Health</td>
<td>Drogas/Drugs</td>
</tr>
<tr>
<td>Educación/Education</td>
<td>Y/and</td>
</tr>
<tr>
<td>Prevención/Prevention</td>
<td>Violencia en las/Violence in the Americas</td>
</tr>
<tr>
<td>Autocuidado/Self-Care</td>
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Funded by NIH / NINR
R01 NR04746
(P.I. Peragallo)

Multicentric Pilot Project
Funded By OAS/CICAD (P.I. Peragallo, Co-P.I. Rosa Gonzalez, C.I. Elias P. Vasquez, Toni Villarruel, and Susie Nemes)
Objectives

Project SEPA

Evaluate a randomized culturally-tailored intervention to prevent high-HIV-risk sexual behaviors for Mexican and Puerto Rican women living in urban areas

Project DYVA

Explore the collective and individual experiences of Latinas with substance abuse, violence and risky sexual behaviors
Developing an HIV/AIDS Risk Reduction Intervention for Latinas

**Project SEPA**

- Focus group (n=49)
  - Clarify literature findings
  - Actual need for intervention
  - Perceived community need
  - Qualitative data

- Interviews
  - Administered n=30 Quantitative data

- Data Analysis
  - Content analysis (qualitative)
  - Descriptive statistics (Quant.)

- Qualitative/quantitative data used in designing intervention
- Pilot testing of intervention

- Intervention Program
  - Quasi-experimental design
  - Random assignment
  - N=657

- Experimental Group
- Control Group

**Project DYVA**

- Focus group (n=82)
  - Clarify literature findings
  - Actual need for intervention
  - Perceived community need
  - Qualitative data

- Interviews
  - Administered n=82 Quantitative data

- Data Analysis
  - Content analysis (qualitative)
  - Descriptive statistics (quantitative)

- Qualitative/quantitative data used in designing intervention
- Pilot testing of intervention

- Intervention Program
  - Quasi-experimental design
  - Random assignment

- Experimental Group
- Control Group
Participants in SEPA & DYVA

**Project SEPA**
- (n=657)
- Mexican and Puerto-Rican Latinas residing in the urban Midwest
- Ages 18 to 44
- Sexually active within 3 months prior to enrollment

**Project DYVA**
- (n=82)
- Heterogeneous sample of Latinas in the Broward/Miami-Dade area
- Ages 18 to 60
## BASELINE DATA for SEPA and DYVA

<table>
<thead>
<tr>
<th>Variables</th>
<th>SEPA (n=454) %</th>
<th>DYVA (n=82) %</th>
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<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-20</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>21-25</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td>26-30</td>
<td>27</td>
<td>10</td>
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<td>31-39</td>
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<td>34</td>
</tr>
<tr>
<td>40+</td>
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<td>43</td>
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<tr>
<td><strong>Ethnicity</strong></td>
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<tr>
<td>South American</td>
<td>0</td>
<td>78</td>
</tr>
<tr>
<td>Mexican/ Puerto Rican</td>
<td>100</td>
<td>6</td>
</tr>
<tr>
<td>Central/ Caribbean</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td><strong>Language</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td>81</td>
<td>96</td>
</tr>
<tr>
<td>English</td>
<td>19</td>
<td>4</td>
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<th>Variables</th>
<th>SEPA (n=454)</th>
<th>DYVA (n=82)</th>
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<tbody>
<tr>
<td>Years in USA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 2</td>
<td>8</td>
<td>24</td>
</tr>
<tr>
<td>3-5</td>
<td>16</td>
<td>26</td>
</tr>
<tr>
<td>6-10</td>
<td>35</td>
<td>28</td>
</tr>
<tr>
<td>11-20</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>21+</td>
<td>21</td>
<td>10</td>
</tr>
<tr>
<td>Education (yrs)</td>
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<td></td>
</tr>
<tr>
<td>&lt; 6</td>
<td>20</td>
<td>7</td>
</tr>
<tr>
<td>7-11</td>
<td>42</td>
<td>7</td>
</tr>
<tr>
<td>High School</td>
<td>19</td>
<td>15</td>
</tr>
<tr>
<td>Beyond HS</td>
<td>19</td>
<td>71</td>
</tr>
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<th>Variables</th>
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<th>DYVA (n=82)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Employed</td>
<td>Yes</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>72</td>
</tr>
<tr>
<td>Insurance</td>
<td>Yes</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>61</td>
</tr>
<tr>
<td>Acculturation</td>
<td>United States (high)</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Hispanic (high)</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>High on both</td>
<td>24</td>
</tr>
</tbody>
</table>
Common Findings from Focus Groups

- Physical, psychological violence
- Cultural norms and acculturation
- Machismo and male infidelity
- Alcohol and drug use
- Social discrimination amongst peers
- Barriers to accessing healthcare
### Violence

<table>
<thead>
<tr>
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<th>DYVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>“...he hit me and I’m not gonna hit him because you’re gonna get hit worse. A man, no matter how bad and how big you are, a man is stronger than a woman. Okay?”</td>
<td>“...because the abusive man always knows how to prepare the scene and starts by diminishing your self-esteem”</td>
</tr>
</tbody>
</table>
Violence

**SEPA**

“...when I had been married only a short while he used to beat me. He wanted me to get pregnant and well I miscarried my first child, and he used to blame me and say that I had taken something and this and that. He wanted me to get pregnant and I couldn’t...”

**DYVA**

“...and he violated me in the most brutal way a woman can be violated...in every way possible that they want to have sex, even if you don’t want to, destroyed and many times bleeding...and he would say—I am your husband, I own you.”
### Machismo and Marianismo

<table>
<thead>
<tr>
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<th><strong>DYVA</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>“...we used to see our mother get beat up by our father. Only because my mother took it, but my mother didn’t know any better. Cause my mother grew up in an environment where there were like, you know, antique, in Puerto Rico, come on, you stay there you are my wife you marry me, you take whatever comes. No, it’s not like that anymore...”</td>
<td>“...women need to change their machista beliefs because there is no one more machista than a woman, not even men themselves... because without realizing it we repeat the same pattern of our mothers and grandmothers, and the generational curse repeats”</td>
</tr>
</tbody>
</table>
“...I used to be embarrassed to say that he had an affair, because you know, we as women are so, especially Latina, we are proud for women, we have the best marriages and we have everything best, but I say it because he’s come a long way. And, for him to be Latino man...”

“(Latino men say) ‘I’m a man and I can have sex with 10 women without a condom’. American men won’t have sex with a woman who doesn’t want any protection, but our machos go to bed with anybody”
### Comparisons of experiences with violence

<table>
<thead>
<tr>
<th>Variable</th>
<th>SEPA (n=454) %</th>
<th>DYVA (n=82) %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reported experiencing physical or child abuse before 18</td>
<td>32</td>
<td>60</td>
</tr>
<tr>
<td>Reported sexual abuse before 18</td>
<td>22</td>
<td>34</td>
</tr>
<tr>
<td>“Any” violence during adulthood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical- sexual</td>
<td>45</td>
<td>52</td>
</tr>
<tr>
<td>Psychological</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>Reported being physically abused</td>
<td>41</td>
<td>46</td>
</tr>
<tr>
<td>Reported being forced into sex</td>
<td>22</td>
<td>26</td>
</tr>
</tbody>
</table>
SEPA Intervention and Results
Community-Based Intervention

Six weekly sessions for two hours:

- Know your own body
- Skill training on condom use
- Sexual communication / negotiation and problem solving
- Violence prevention / conflict management
- Risk awareness/ risk management
- Peer support for change efforts
SEPA group at one of the community sites
Comparisons of Condom Use

Intervention

Control

N = 454
N = 394
N = 422

Baseline
3 months
6 months

Condom Use (always), %

0
10
20
30

N = 454
N = 394
N = 422

Baseline
3 months
6 months
Results Using Multiple Linear & Logistic Regression

<table>
<thead>
<tr>
<th>Group</th>
<th>OR</th>
<th>CI</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condom Use</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 months</td>
<td>2.018</td>
<td>1.021, 3.985</td>
<td>.043</td>
</tr>
<tr>
<td>6 months</td>
<td>2.044</td>
<td>1.292, 3.234</td>
<td>.002</td>
</tr>
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</table>

Adjusted by Baseline score of each dependent variable, acculturation, ethnicity, poverty, insurance, lived with partner
Safer Sex Peer Norms

![Graph showing the change in Safer Sex Peer Norms over time for intervention and control groups.]

- Intervention Group:
  - Baseline: N = 454
  - 3 months: N = 394
  - 6 months: N = 422

- Control Group:
  - Baseline: N = 454
  - 3 months: N = 394
  - 6 months: N = 422
Perceived Barriers to Condom Use

![Graph showing perceived barriers to condom use over time with intervention and control groups.]

N = 454  N = 394  N = 422
Partner Communication

- **Intervention**: N = 454
- **Control**: N = 394
- 3 months:
  - Intervention: N = 422
  - Control: N = 422

Communication ≥ 7 vs. Time:
- Baseline
- 3 months
- 6 months
Intention to Use Condoms

Risk Reduction Behavioral Intention ≥ 13

Intervention

Control

N = 454
N = 394
N = 422

Baseline
3 months
6 months
Conclusions & Implications

• Project SEPA was highly successful in increasing condom use, HIV health protective communication, and HIV knowledge and decreasing risk behaviors among low income, primarily Spanish speaking Latinas.

• This study provided evidence that HIV/AIDS prevention interventions must be culturally tailored to the targeted population of the intended program.
Recommendations Based on SEPA

- Community-based and culturally-tailored
- Strong referral system established (e.g. mental health, domestic violence, housing)
- Sustained contact and booster sessions at 6 months
- Critical to address violence, mental health issues, discrimination, lack of access to healthcare
- Interventions must target non-English speaking populations
SEPA group showing off diplomas
Unfinished Business

Measuring Health Disparities:

• Racial & ethnic
• Socioeconomic
• Rural health
Unfinished Business

Understanding health disparities:
• Biological factors
• Health care access and quality
• Physical environment
• Social environment
• Behavioral factors
• Stress
• Discrimination
The Future of Health Disparities Research

• Create consensus on the conceptualization of health disparities

• Improve methods for identifying, understanding and measuring health disparities

• Improve methods of data collection of demographic information for health disparities populations

• Increase insight into causes of health disparities

• Development of common measures

• Increase participants of racial and ethnic minority populations in research studies
Future for Health Disparities Research

• Increase opportunities for research training, career development, and research supplements to researchers from racial and ethnic minority populations

• Increase funding to support health disparities research

• Increase representation of racial, ethnic and other health disparity populations in peer review groups
The Future Paradigm: Transforming Medicine from Curative to Preemptive

PREDICTIVE
Understanding risk factors
Genetic risks assessments
Health determinants

PERSONALIZED
Genomic medicine
Sociocultural relevant

PREEMPTIVE
Health promotion across the lifespan
Increased access to care & health screenings

Thank you