Fit vs Fidelity: Health Program Evaluation in a Foreign Country

Samuel A. Matos-Bastidas
University of South Florida
College of Public Health
Department of Global Health

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Agenda

- **Unmet Need**
  - **Heart Disease in Venezuela**
  - **Health Promotion in Venezuela**
  - **From Community Health Workers to *Promotores***
- Proposed Health Intervention
  - *"Su Corazon, Su Vida"* (Your Heart, Your Life) Program
  - Original Version
  - Adapted Version
- Evaluation Plan
  - Objectives
  - Setting
  - Subjects
  - Evaluation Instruments
  - Evaluation Questions
  - Phases
  - Data Analysis
- Culture and Health
  - What is Culture?
  - Cultural Competence Continuum
  - Cultural Nuances

Unmet Need:
Heart Disease Epidemic

- Cardiovascular Diseases (CVDs) include ischemic coronary disease, congestive heart failure, cerebrovascular disease (stroke), and peripheral vascular disease
- About 31% of all fatalities worldwide
- High mortality rates: Guyana (292/100,000), Trinidad and Tobago (289/100,000), and Venezuela (246/100,000)

(WHO, 2015)

Unmet Need: Venezuela's Brief Country Profile

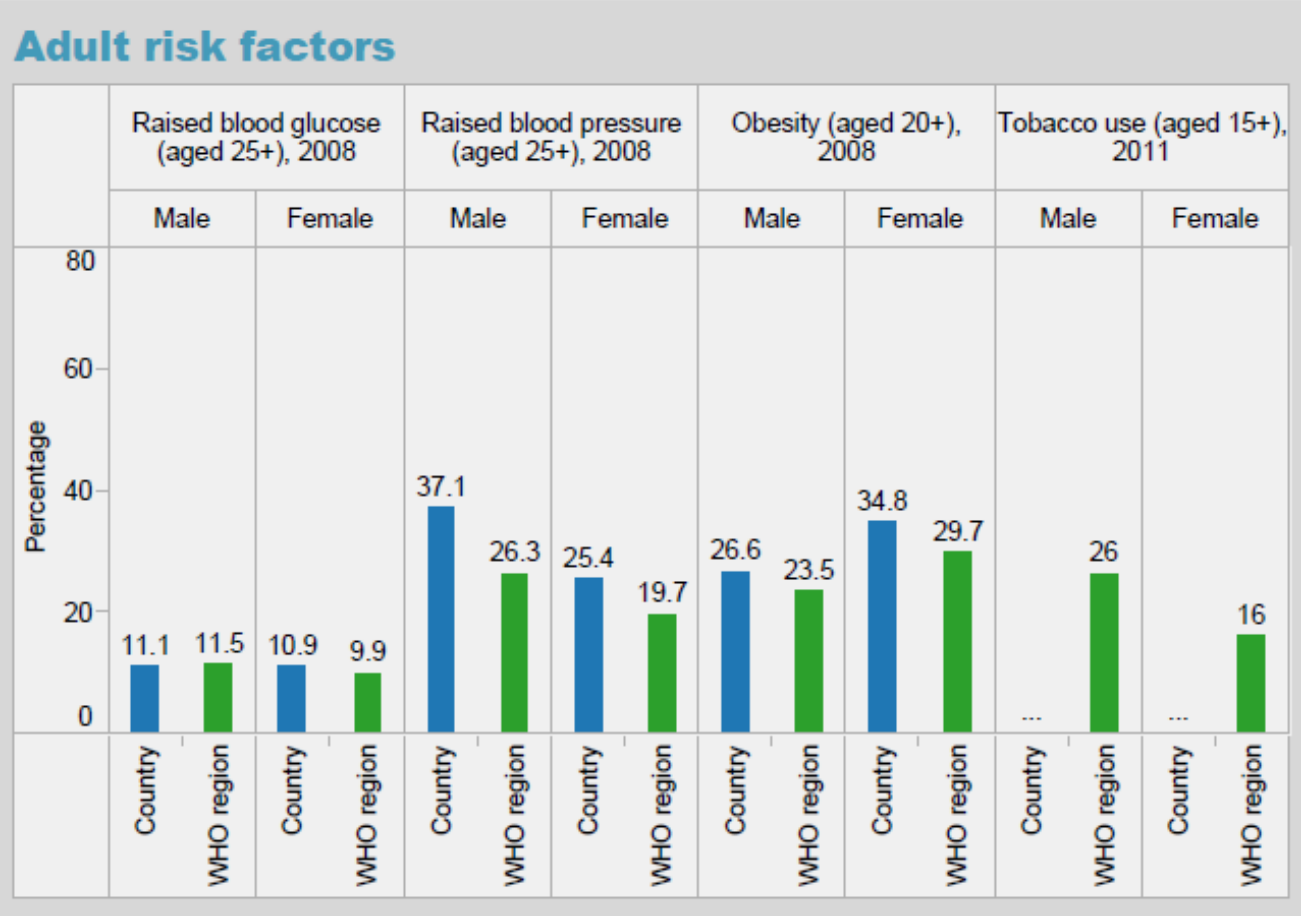
Total population (2013)	**30,405,000**	
Gross national income per capita (PPP international $, 2013)	**17**	
Life expectancy at birth m/f (years, 2013)	**72/80**	
Median Age (years, 2013)	**27**	
Population living in urban areas (%, 2013)	**89**	
Probability of dying between 15 and 60 years m/f (per 1 000 population, 2013)	**198/88**	
Total expenditure on health per capita (Intl $, 2013)	**656**	
Total expenditure on health as % of GDP (2013)	**3.6**	(WHO, 2015)

Unmet Need:
CVD in Venezuela

- 30,548 deaths from heart disease in 2011
- Ranked No. 1 in top 25 causes of death (about 21.4% of all-cause mortality)
- 11,000 more caused by stroke (No. 3 with 7.7%)
- High blood pressure (No. 15)

(MPPS, 2014)

Unmet Need:
CVD Risk Factors in Venezuela



(WHO, 2015)

Unmet Need:
Health Promotion in Venezuela

- Highly politicized Ministry of Health
- Cardiovascular, Renal, Endocrine & Metabolic (CAREM) Program
- *Barrio Adentro* (Inside the Neighborhood) Program: *Promotores* involved in health fairs, exercise clubs for older adults, door-to-door health censuses
- *Barrio Adentro* not specifically targeting CVDs

(MPPS, 2010; Cooper, 2015; Bonvecchio et al, 2011)

From Community Health Workers to *Promotores:* Definition

- "A Community health worker (CHW) is a frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community served. This trusting relationship enables the CHW to work as a liaison and intermediary between health and social services, and the community to facilitate access to services and improve the quality and cultural competence of service delivery" (APHA, 2009)
- Office of Minority Health endorsed the CHW definition proposed by APHA, equalizing it to *promotora de salud,* whether volunteer or paid (DHHS, 2011)

From Community Health Workers to *Promotores:* Evolution

- Traditional practices involving local, lay helpers
- Barefoot Doctors (China)
- Village Health Volunteers (Thailand)
- CHWs (U.S.)
- Community Workers (Alma-Ata)
- Rural Health Assistants, Brigadistas, *Promotores de Salud* (Latin America, Venezuela)

(Zhu, Ling, Shen, Lane, & Hu, 1989)

Duties and Competencies of CHWs

- Culturally appropriate health education and information
- Cultural mediation between communities and health and social service systems
- Ensure people get needed services
- Provide informal counseling and social support
- Advocacy for needs
- Provide direct services (medically and socially-oriented tasks)
- Capacity building

(APHA, 2009)

Determinants of Health Promotion Success

- Community Participation
- Political Stewardship and Adequate Resourcing
- Selection of appropriate CHWs
- Training and Continuing Education
- Appropriate Supervision and Infrastructure Support

(WHO, 2007)

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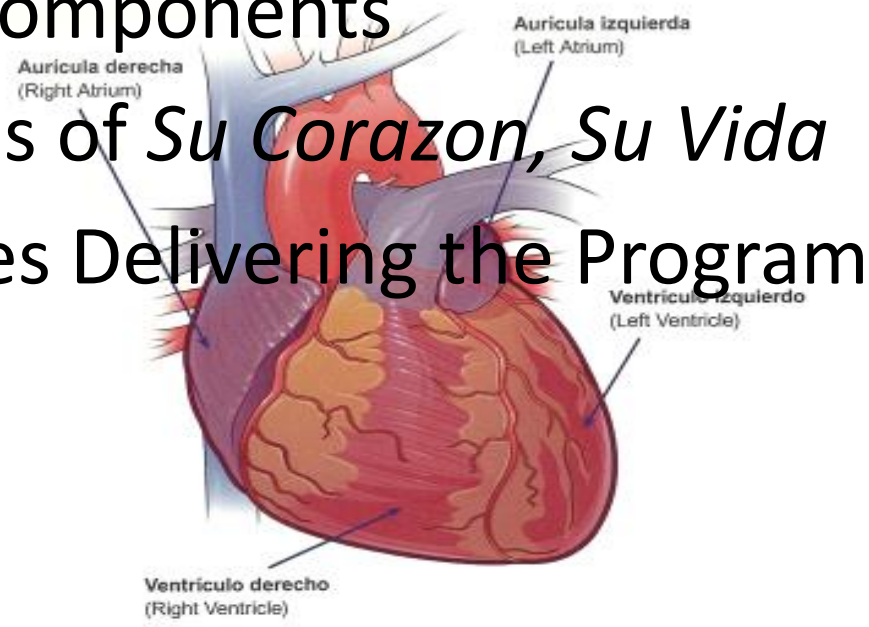
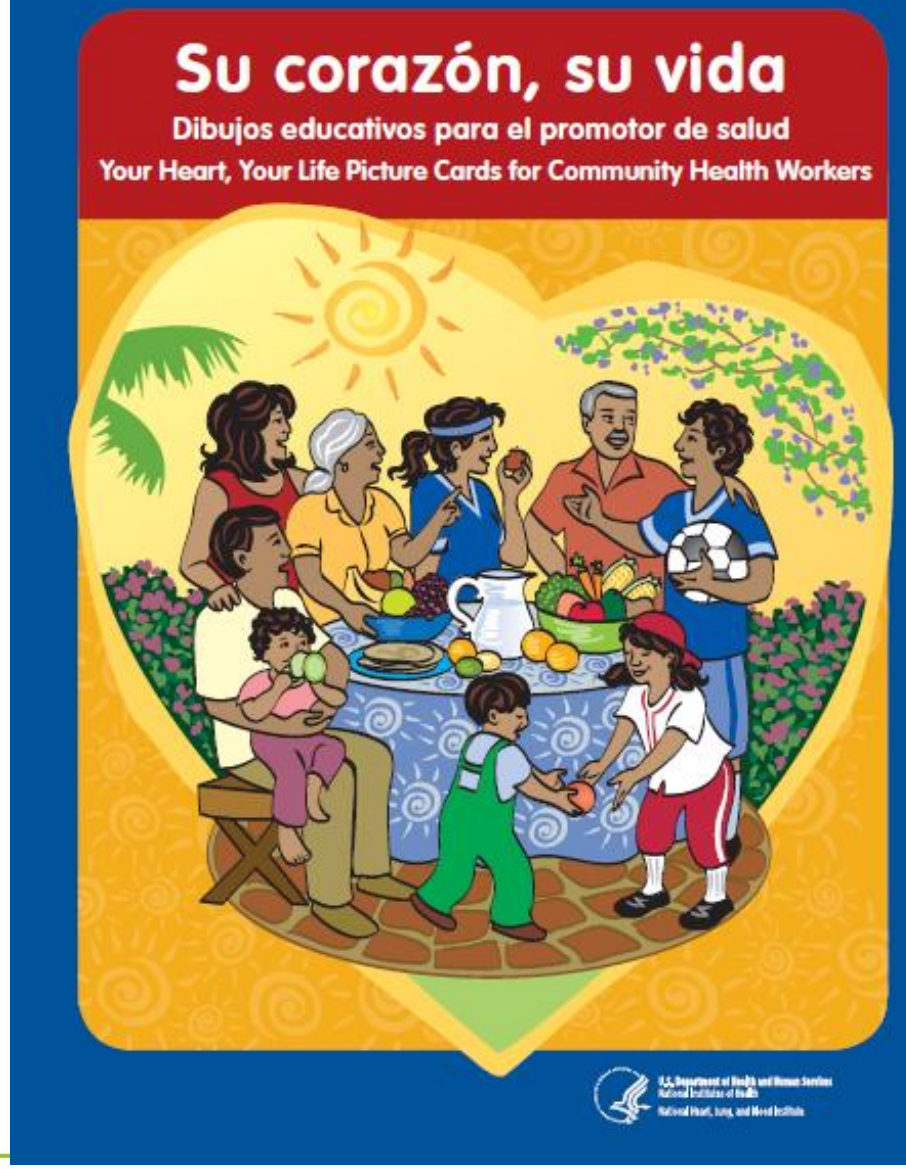
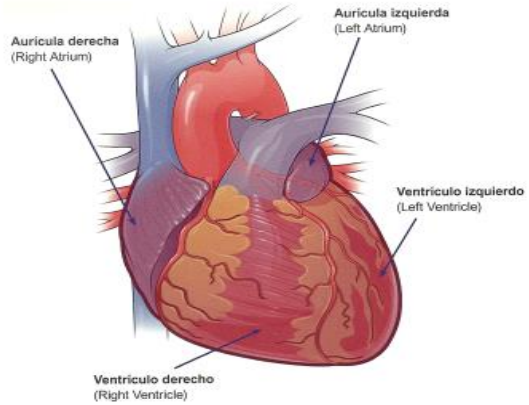
Proposed Health Intervention: Program *Su Corazon, Su Vida*

- Brief History
- Program Components
- Advantages of *Su Corazon, Su Vida*
- Experiences Delivering the Program





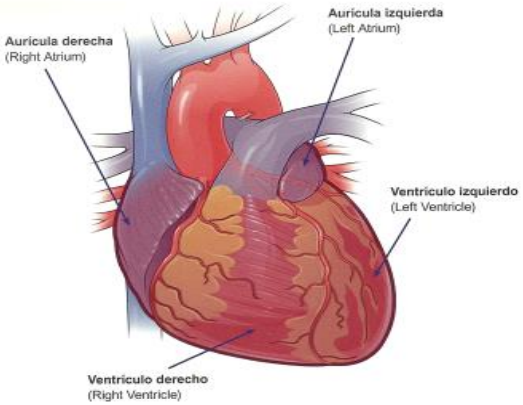
Proposed Health Intervention: Program *Su Corazon, Su Vida*



- Developed 1999; Reviewed 2008
- Culturally sensitive heart health promotion program
- Can be delivered in Spanish or English
- Based on simple concepts of behavioral control of CV risk factors
- Colorful picture cards or PDF format
- Includes familiar contexts, role play and games

(NHLBI, 2014)

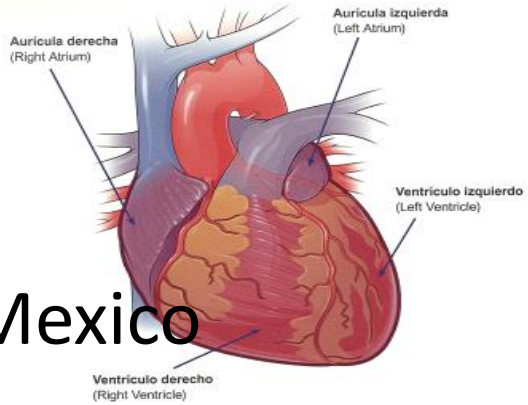
Proposed Health Intervention: Program *Su Corazon, Su Vida*



- Widely tested and utilized in the U.S.
- CVD as primary target without neglecting other chronic conditions
- Focused on CVD prevention rather than control
- Culturally competent in Latino communities
- Available in Spanish from its creation
- Understandable to low literacy audiences
- Developed with input from CHWs
- Designed to be facilitated by *promotoras*

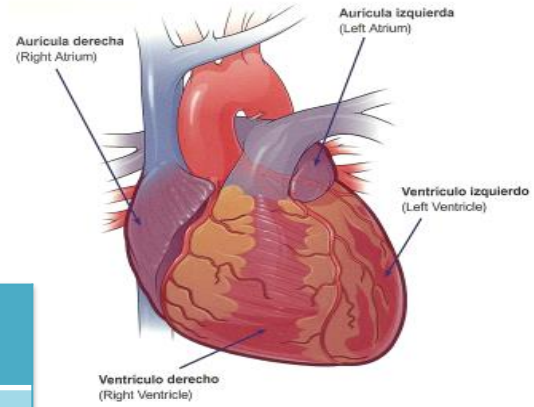
(NHLBI, 2014)

Proposed Health Intervention: Program *Su Corazon, Su Vida*



- Successfully implemented in California, Illinois & New Mexico (Balcazar, Alvarado, Hollen, Gonzalez-Cruz, Hughes, Vazquez, & Lykens, 2006)
- Some experience in northern Mexico (Balcazar, Byrd, Ortiz, Tondapu, & Chavez, 2009)
- Increased perceived susceptibility to CVD risk factors and benefits of healthy behaviors (Balcazar, de Heer, Rosenthal, Aguirre, Flores, Puentes et al, 2010)
- Improvement in self-reported behaviors related to weight control, salt and fat consumption (Balcazar et al, 2010)
- Enhanced physical activity and perceived awareness and motivation to workout (Trudnak, Lloyd, Westhoff, & Corvin, 2011)

Program *Su Corazon, Su Vida:* Original and Adapted Version



Original Session	Topic	Modified Session
1	Are You at Risk for Heart Disease?	
2	Act in Time to Heart Attack Signs	1
	Video: Act in Time to Heart Attack Signs	
3	Take Heart: Say Yes to Physical Activity	
4	Help Your Heart: Control Your High Blood Pressure	2
5	Be Heart Smart: Keep Your Cholesterol in Check	
6	Keep Your Heart in Mind: Aim for a Healthy Weight	3
7	Protect Your Heart: Take Good Care of Your Diabetes for Life	
8	Make Heart Healthy Eating a Family Affair	
9	Eat in a Heart Healthy Way—Even When Time or Money Is Tight	4
10	Enjoy Living Smoke Free	
11	Review and Graduation	

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Evaluation Plan: Purpose

- Evaluate the training process and learning outcomes in members of a faith-based youth organization in Barquisimeto, Venezuela who will receive *Su Corazon, Su Vida* program for the first time
- Assess the perceptions of community members who will receive the program from the newly trained church members

Evaluation Plan: Objectives

- Objective 1: To evaluate the learning outcomes of newly trained health promoters after completion of the *Su Corazon, Su Vida* program
- Objective 2: To evaluate the perceived benefits and challenges experienced by *promotores de salud* during the training to facilitate *Su Corazon, Su Vida*
- Objective 3: To assess the perceived benefits and challenges encountered during the facilitation process of *Su Corazon, Su Vida* to community members

Methods: Setting

- Lara State
- Barquisimeto City
- Seventh Day Adventist Church
- SDA Youth Group

Methods: Subjects

- Population: The total membership of the SDA church's youth groups in Barquisimeto metropolitan area is approximately 600 individuals in good standing within their clubs

- Sample:
  - A random sample of 60 youth church members, to be trained as health promoters, will be recruited from three local congregations: Northwest, Maranatha and San Jacinto churches
  - A purposive sample of 60 individuals will be recruited from among those community members who have received the program from the newly trained *promotores*

Methods: Phases

- Phase I:
  - Direct Intervention: *Su Corazon, Su Vida Promotores* Training during four 2-hour sessions

- Phase II:
  - Mediated Intervention: *Su Corazon, Su Vida* facilitation to Community Members during four 2-hour sessions

Evaluation Plan: Phase I Questions

Objective	Evaluation Question
1	1. What is the relationship between promotores' prior knowledge and learning outcomes?
1	2. What is the relationship between promotores' education level and learning outcomes?
1	3. What is the relationship between promotores' duration of club membership and learning outcomes?
1	4. What is the relationship between promotores' age and learning outcomes?
1	5. What is the relationship between promotores' gender and learning outcomes?

Evaluation Plan: Phase II Questions

Objective	Evaluation Question
2	6. What are promotores' perceptions of Su Corazon, Su Vida compared to other conventional heart health programs in Venezuela?
3	7. What are community members' perceptions of Su Corazon, Su Vida compared to other conventional heart health programs in Venezuela?

Methods: Evaluation Instruments

- Phase I:
  - Direct Intervention: *Promotores* Readiness Test (PRT-0, PRT-1), 27 close-ended questions, 30 min
- Phase II:
  - Mediated Intervention: Focus Groups

Methods: Data Analysis

- Quantitative:
  - ANOVA
  - Simple and Multiple Linear Regression
- Qualitative:
  - Coding
  - Categorization
  - Summarization

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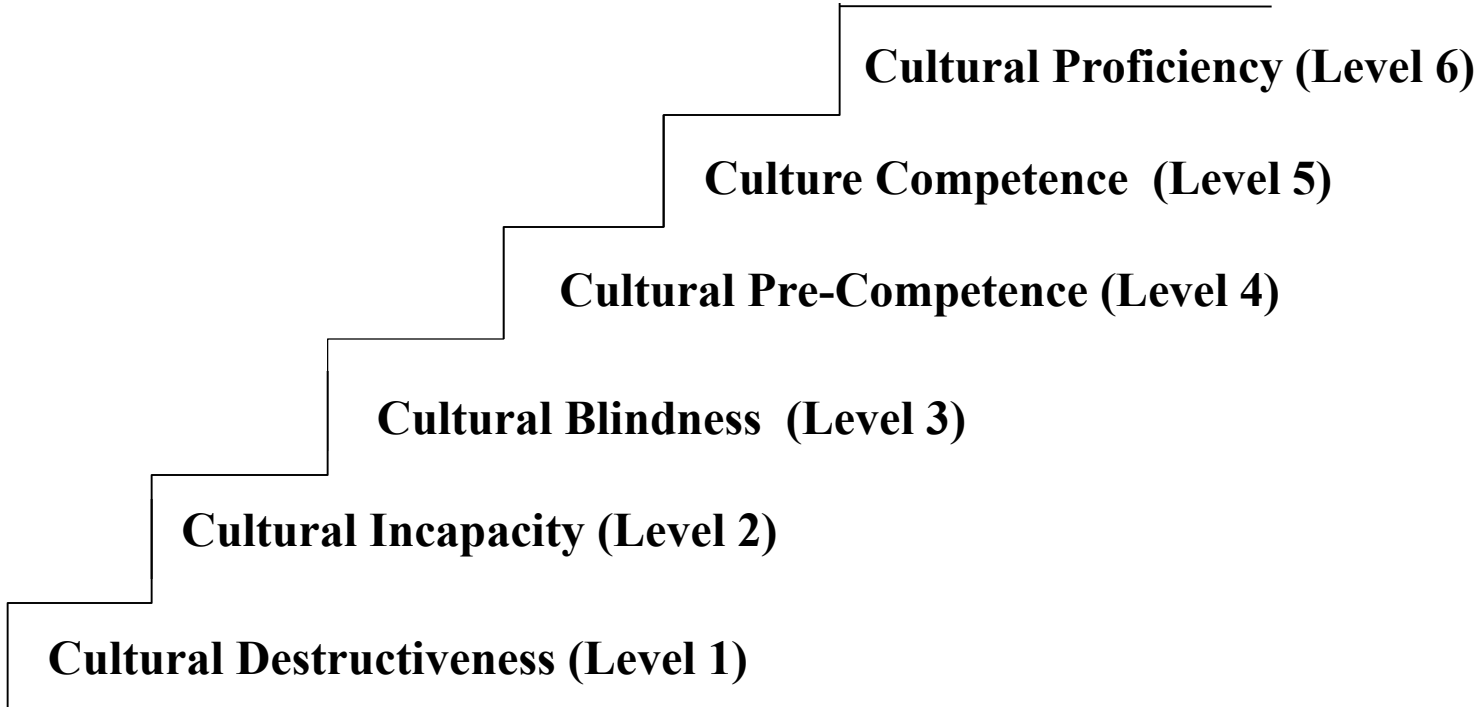
What Is Culture?

- Culture is the customs, beliefs, values, knowledge, and skills that guide people along shared paths (Linton, 1947)
- Culture refers to the way of life of people and includes the tools or methods by which they extract a livelihood from their environment (Corsini, 1987)
- Culture does affect how illness, disease, and their causes are perceived
- Subsequently, culture affects behaviors of patients/consumers who are seeking services and their attitudes toward health care providers

Cultural Competence

- Cultural Competence Starts with the recognition & awareness of one's own Biases/Prejudices
- "The process by which individuals and systems respond respectfully and effectively to people of all cultures, languages, classes, races, ethnic backgrounds, religions, and other diversity factors in a manner that recognizes, affirms, and values the worth of individuals, families, and communities and protects and preserves the dignity of each." (NASW, 2001)

Cultural Competence Continuum



Adapted from Cross, T.L., B.J. Bazron, K.W. Dennis, and M.R. Isaccs. "The Cultural Competence Continuum." Toward a Culturally Competent System of Care: A Monograph on Effective Services for Minority Children Who Are Severely Emotionally disturbed. Washington, D.C.: Child and Adolescent Service System Program (CASSP), Technical Assistance Center, Center for Child Health and Mental Health Policy, Georgetown University Child Development Center, 1989; p.13.

Cultural Nuances in Venezuela

- Same language, but…no
- Role of Religion
- Youth Values
- Individual vs Family

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- Questions?
- Comments?

smatos@health.usf.edu