Community participation: How promotores de salud are part of a system of care to change clinical outcomes for chronic disease in EL Paso, Texas

NIH – Funded Project from NIH/NCMHD Community Based Participatory Research (CBPR) Initiative in Reducing and Eliminating Health Disparities.
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Why El Paso?

- Heart disease is leading cause of death & disability for Mexican Americans
- Chronic disease impact many border residents
- Significant barriers to healthcare
- Environmental health challenges
- Promotores are well established in the region
- Strong research & community partners = NIH/UTEP award

The community deserves access to the best resources.

Community Partners

- Community Health Worker (CHW)
- *Promotor(a) de Salud* (PS):
  – CHW/*PS*
- UTEP, EPCC, CSVC, UT SPH EP
- El Paso Community

Together, we can create strong partnerships in the community to prevent & control chronic disease common in the U.S.-Mexico border region.

Project Goals

The goal of this research is to create and unite strong partnerships in the El Paso community to strengthen our capacity to work together to prevent and control chronic diseases common in the U.S. – Mexico border region.

Project Goals cont.

To engage local Community Health Workers/*promotores* (CHW/P) in networking in order to work together to build the capacity of CHW/Ps in the region and to set the stage for policy change to better support CHW/Ps in the health and human services system

Steps in Building Community Capacity-Major Accomplishments

- Gathered information from the community
(3 focus groups, 1 community forum for promotores showcasing "best practice approaches", 1 photo voice activity with team to build momentum for the project)

- Created a Community Health Advisory Committee (CHAC)
- Named the Community Project and Developed Logo
- Created a Promotora Resource Center/Project Website
- Built a Needs Assessment for EL Paso County
- Refined a P*romotora Pilot* intervention – Develop a Cost-Benefit Analysis
- Launched a Community Randomized P*romotora Field Trial* intervention

- Evaluate the *Promotora* Intervention
- Share findings from the Study

Community Health Advisory Committee

Community Health Advisory Committee (CHAC)

HEART

Research Team → 14 Community Members Lower Valley ← EPCC

CSV Clinic
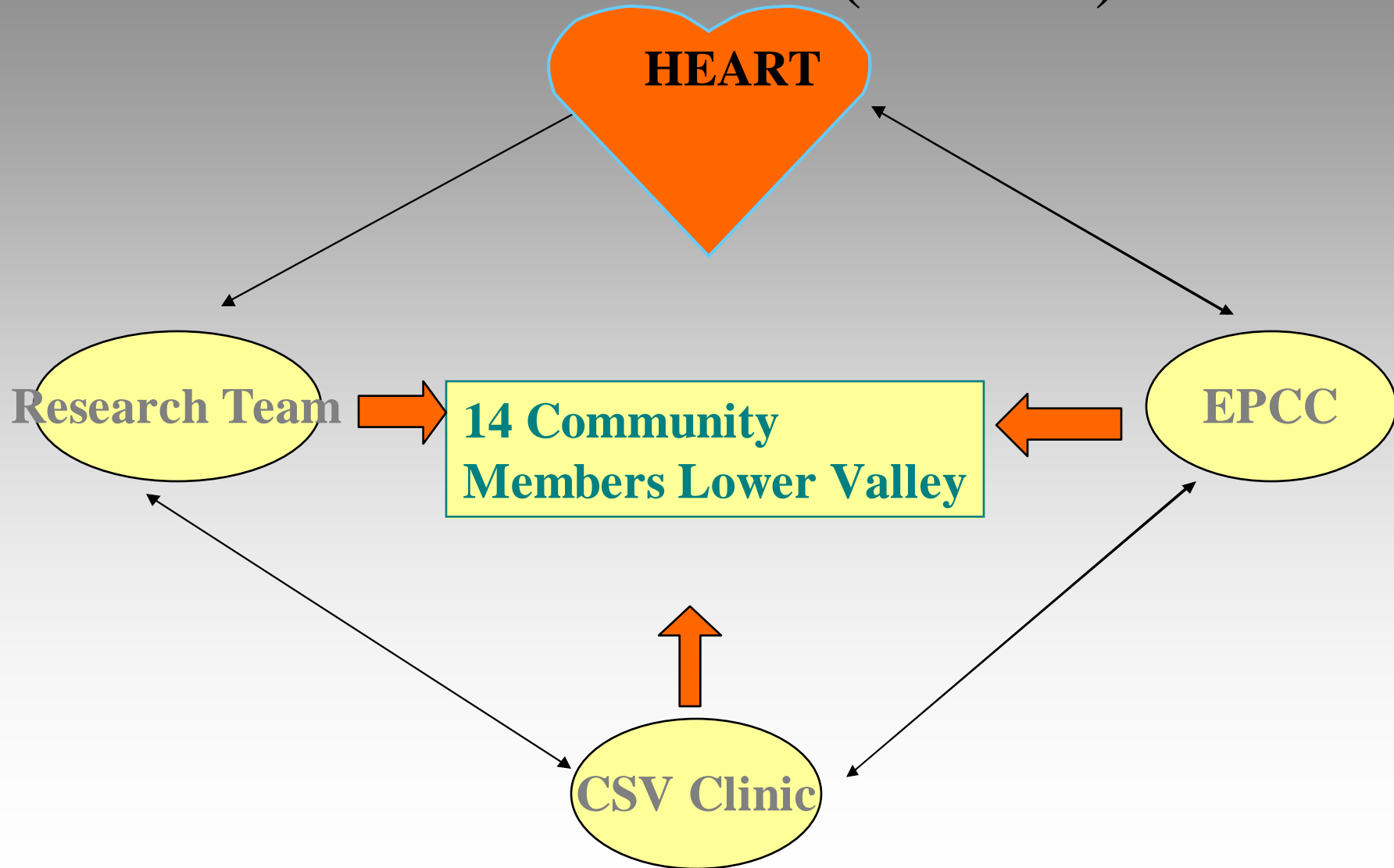
La Vision de la Promotora -
Es la Vision de la Comunidad

Promotores de Salud Vision

Salud para su corazón
del Norte de Tejas

Previous Experience in
CBPR- with
Promotores de Salud

Health Education Awareness
Research Team

LOGO For EL PASO
PROJECT HEART

THE VISION OF HEART IS
THE VISION OF THE
PARTICIPATORY
COMMUNITY In El Paso

CBPR- Build Commumnity Capacity for CHW/PS

Special project feature:
strengthening area promotores and access to health information resources

- A health resource library: *at EPCC and on the web*
- CHW/P photo reflections on their role in El Paso
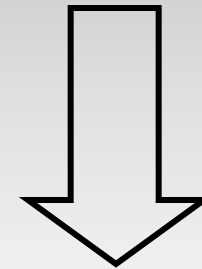- Cost-benefit analysis of CHW/Ps program/s

Building Further The CBPR HEART PROCESS

1.Needs Assessment and Selection of EL Paso Lower Valley area- ZIP code 79915

2. Planning the Intervention

3. Role of CHAC, CSVC, Research Team and EPCC

Building Models of PS in the Community- Salud Para Su Corazon

CHS/PS Community Randomized Field Trial

Assessing/Evaluating Needs

Census Data for EL Paso, Texas Lower Valley Residents by Zip Code

	79849	79927	79907	**79915**	79905
Total Population	10,748	54,529	55,133	**42,178**	28,702
Hispanic or Latino (%)	98.4	92.8	94.5	**93.9**	96.4
(%) Spanish Spoken at Home (ages 5 to 17)	97.3	88.7	83.7	**81.8**	91.1
(%) Spanish Spoken at Home (ages 18+)	97.4	87.3	89.0	**86.7**	90.8
Median Age	22.5	26.0	28.9	**32.8**	32.3
Median Household Income (dollars)	20,100	26,650	26,447	**23,400**	17,723

Planning The Intervention- How?

- Community Health Outreach Model

- Su Corazon, Su Vida

- Centro San Vicente - promotores
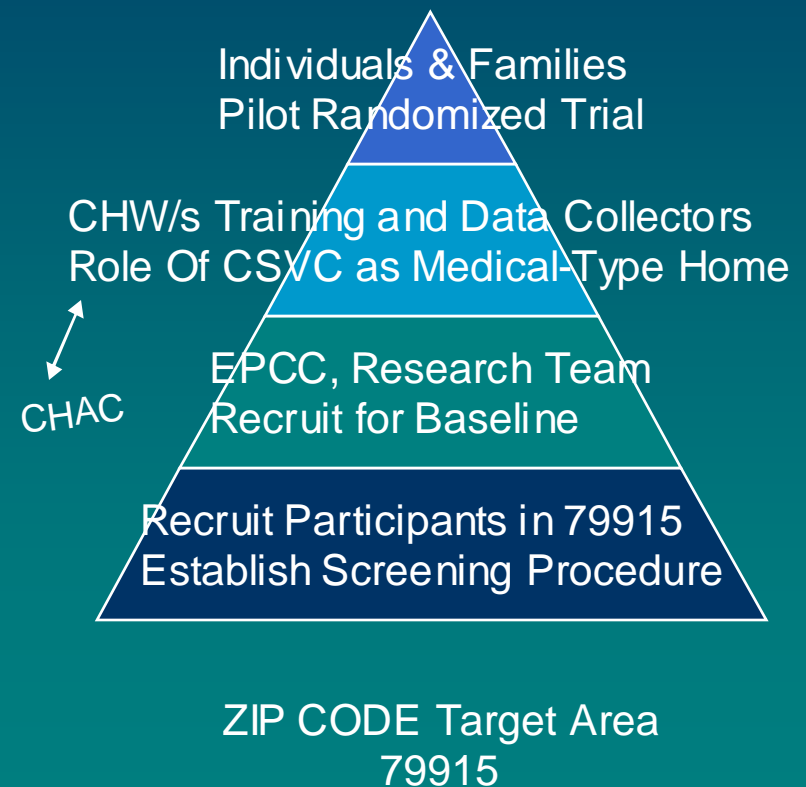 - community Involvement
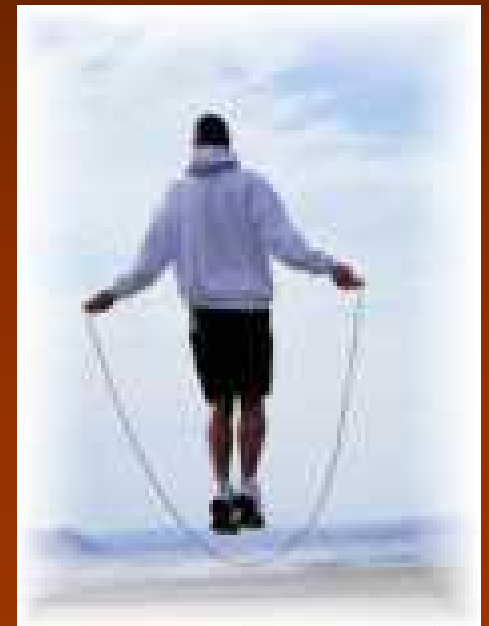
Goals for the community:

- Improved access to healthcare

- Decreased health disparities

- Sustained community health

- *Interventions that last!*

Role of CHAC, CSVC, EPCC, Research Team

- 1. SPSC Served as Catalyst For Action Plan to Deliver Intervention

- 2. Model Of Outreach to Target 330 Hispanic Adults

- Four-Month Intervention Guided By CHW/PS

Individuals & Families
Pilot Randomized Trial

CHW/s Training and Data Collectors
Role Of CSVC as Medical-Type Home

EPCC, Research Team
Recruit for Baseline

CHAC

Recruit Participants in 79915
Establish Screening Procedure

ZIP CODE Target Area
79915

Method Pilot Study

- Random recruitment by 'knocking on 3,969 doors' in selected zipcode

- Random selection of census tract in Experimental or Control condition

- Total of 325 eligible participants agreed to participate and took baseline measurement
    - n=133 control
    - n=192 experimental

Experimental n=192

Control n=133

BASELINE MEASUREMENT n=325

**8 health classes (1/wk)
based on Su Corazon Su Vida**

8 weeks of CHW/PS phone contact

**Information packet of
Su Corazon Su Vida**

**After 16 Weeks:
FOLLOW UP MEASUREMENT (intended n=325)**

Results

■ Selected Demographic characteristics of the sample:

Ehtnicity and Acculturation	
● Ethnicity	100% Hispanic descent
● Gender	233 females, 92 males
● Age	54 ±13 years old Lived in US average of 39 years
● BirthPlace	54.9 % born in Mexico
● Language	95% speaks Spanish; 48% bilingual
● '*Gyndex*' score	Low to Moderately acculturated (2.08 to 2.63 on a 1-5 scale)

Results

- Socioeconomic characteristics of the sample:

SES and Risk Factors	
•Income	72% under $20,000
•Employment	67.7% is unemployed
•Education	76% high school or less
•Risk Factors for CVD	100% has at least one risk factor for CVD development: •High BP •High Cholesterol •Diabetic •Overweight •Smoking

Results:
Clinical measures at Baseline

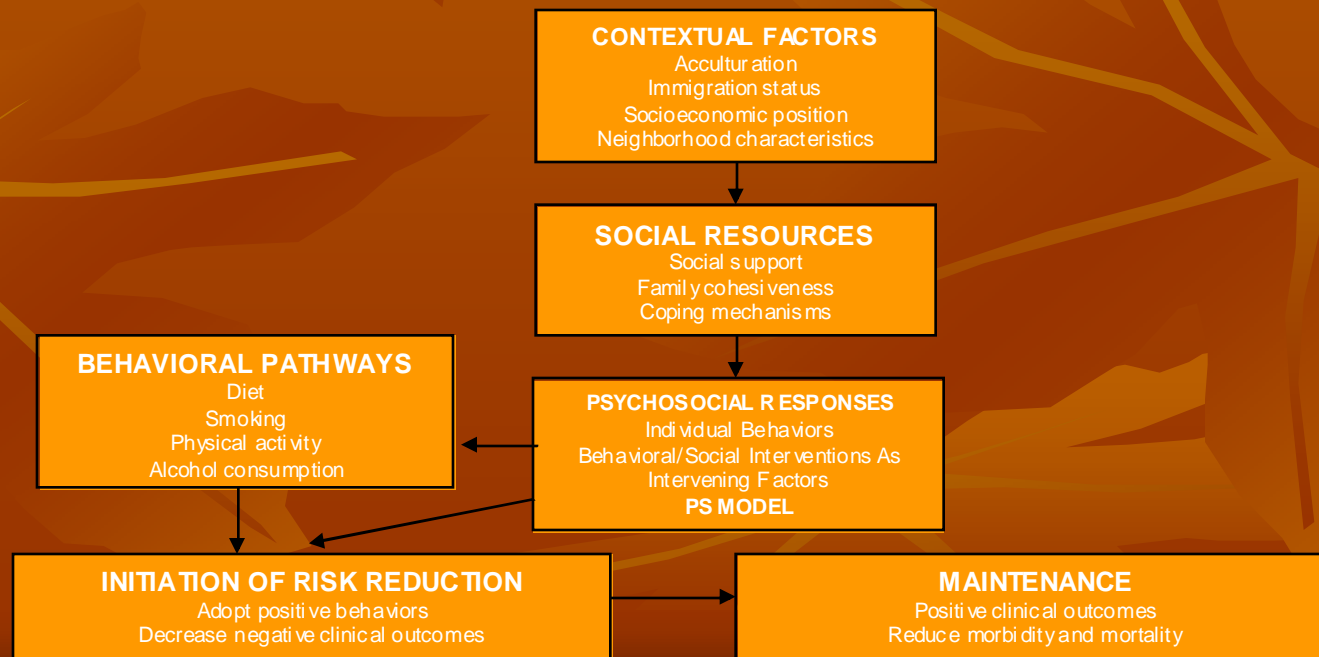| Variable	n	Mean (SD) Control*	n	Mean (SD) Experimental*
Age (yr)	133	53.9(13.2)	185	53.8(13.3)
Height (in)	133	64.5(3.4)	180	63.8(3.9)
Weight (lbs)	133	184.6(42.8)	185	183.7(42.5)
Waist (in)	130	40.4(6.0)	183	40.7(6.0)
BMI (kg/m²)	133	31.0(6.5)	183	31.7(6.9)
Triglycerides (mg/dL)	133	143.9(90.6)	188	157.5(316.4)
LDL Cholesterol (mg/dL)	130	120.1(32.2)	186	126.5(35.7)
HDL Cholesterol (mg/dL)	133	43.3(14.0)	187	40.3(11.6)
Glucose	135	96.8(30.1)	190	102.8(47.1)
HbA1C (%)	133	6.3(1.3)	187	6.6(1.7)
Systolic BP (mmHg)	131	142.2(21.0)	182	135.9(22.1)
Diastolic BP (mmHg)	131	83.3(10.8)	182	80.3(11.7)

Exp vs Control
Clinical Measures at follow up

Variable	Unit	n	Change Control Mean (SD)	n	Change Experimental Mean (SD)	
Weight	Lbs	115	-.12(5.57)	145	-1.28 (5.83)	
BMI	kg/m²)	114	.18 (1.48)	144	-.07 (1.46)	
Waist	in	113	-0.66 (2.85)	140	0.01 (2.38)	
Total Cholesterol	mg/dL	112	0.19 (29.41)	123	-4.76 (33.94)	
Triglycerides	mg/dL	108	-1.06 (52.63)	122	8.74 (54.37)	
LDL Cholesterol	mg/dL	108	-0.05 (24.09)	121	-6.56 (29.06)	
HDL Cholesterol	mg/dL	111	-1.33 (7.39)	122	0.05 (6.60)	
Fasting Glucose	mg/dL	112	3.46 (30.28)	123	2.32 (34.78)	
HbA1C	%	112	0.20 (0.72)	122	-0.04 (1.14)	
Systolic BP	mm/Hg	111	-10.17 (14.74)	136	-5.63 (14.30)	
Diastolic BP	mm/Hg	111	-4.58 (8.82)	136	-2.17 (7.88)	

Community Health Workers and Community-Based Participatory Research

A expanded framework would address the following factors hypothesized to affect health promotion and education among Hispanics residing along the U.S.-Mexico border.

CONTEXTUAL FACTORS
Acculturation
Immigration status
Socioeconomic position
Neighborhood characteristics

SOCIAL RESOURCES
Social support
Family cohesiveness
Coping mechanisms

BEHAVIORAL PATHWAYS
Diet
Smoking
Physical activity
Alcohol consumption

PSYCHOSOCIAL RESPONSES
Individual Behaviors
Behavioral/Social Interventions As
Intervening Factors
PS MODEL

INITIATION OF RISK REDUCTION
Adopt positive behaviors
Decrease negative clinical outcomes

MAINTENANCE
Positive clinical outcomes
Reduce morbidity and mortality

HEART Phase 2

- Phase 2 of the project will collaborate with the YWCA and the City Parks & Recreations

  - Aim #1- Strengthen our CBPR process
  - Aim #2- Conduct an intervention in the Lower Valley of El Paso, Texas
  - Aim #3- Evaluate the effectiveness of HEART phase 2
  - Aim #4- Work with the CHALC, community partners, and CHWS/PS to plan dissemination of the research findings