# KNOWLEDGE OF CANCER PREVENTION AND SCREENING IN AN UNDERSERVED GROUP OF HISPANIC WOMEN: THE EFFECTS OF A CULTURALLY-SENSITIVE EDUCATIONAL PRESENTATION

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#### Rationale

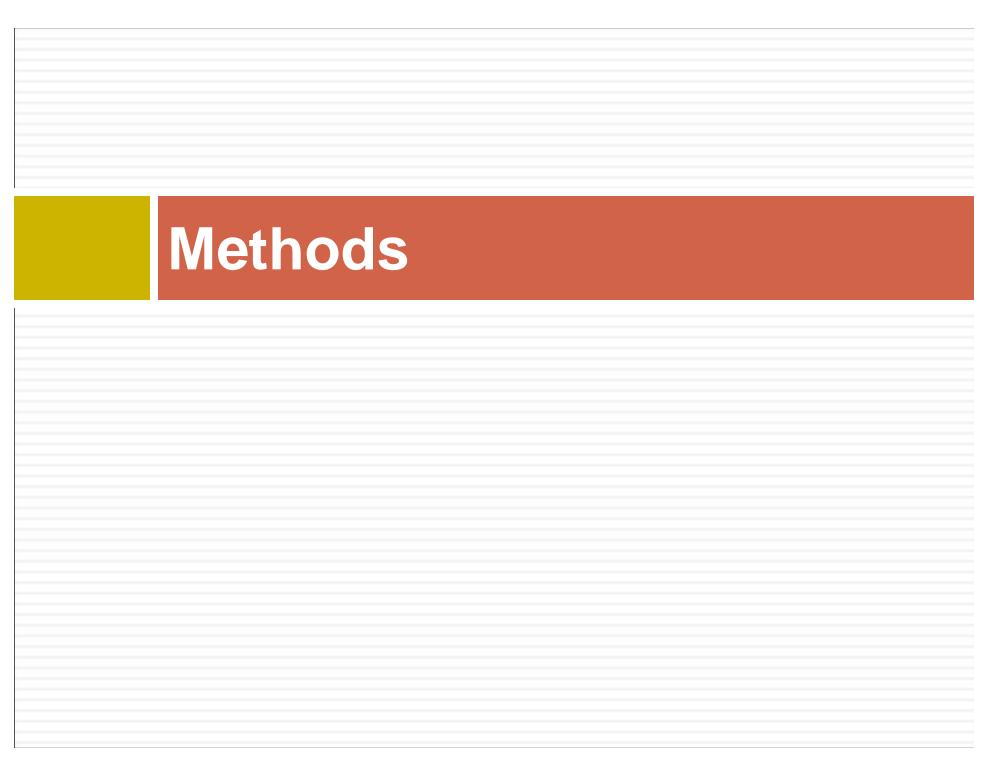
- Hispanic women are more likely to be diagnosed with advanced stage disease.
   Estimated five-year survival rate is only 76%.
- Incidence of cervical cancer in Hispanic women double that of Caucasian women 8.7/100,000 vs. 15.8/100,000

#### Rationale

- Studies show Hispanic women are less likely to undergo routine screenings for breast, cervical, and colorectal cancers
- Studies using social learning theory show positive health behavior is more likely to occur when reinforced by members of the same social network

## Objective

- Measure baseline knowledge of cancer prevention, screening, and early detection practices
- Evaluate the effectiveness of a culturallysensitive presentation in altering the baseline values associated with cancer risk in terms of
  - Knowledge
  - Screening behavior



## Design of Evaluation

- 2 surveys (pre- and post-) created in English and translated into Spanish
  - Assess baseline knowledge, attitudes, and cancer screening practices,
  - Identify the barriers to receiving cancer screening, and
  - Determine the effectiveness of the presentation as an educational tool.

# Study subjects

- Hispanic women recruited from Nassau and Suffolk counties in Long Island, NY
- Low English speaking skills
- Lower socioeconomic level
- Lack access to the healthcare system

# Recruiting

- 180 volunteers were recruited from four community outreach centers: Casa Maria, Sisters of St. Joseph, Circulo de la Hispanidad, and Family Service League.
- Recruited during their ESL classes + flyers

#### Intervention

- A culturally-sensitive educational presentation on cancer screening, prevention, and early detection.
- "Screening Tests and Cancer Prevention What Every Woman Should Know."
- Designed for eighth grade educational level
- Delivered in Spanish by a Hispanic obstetrician and gynecologist

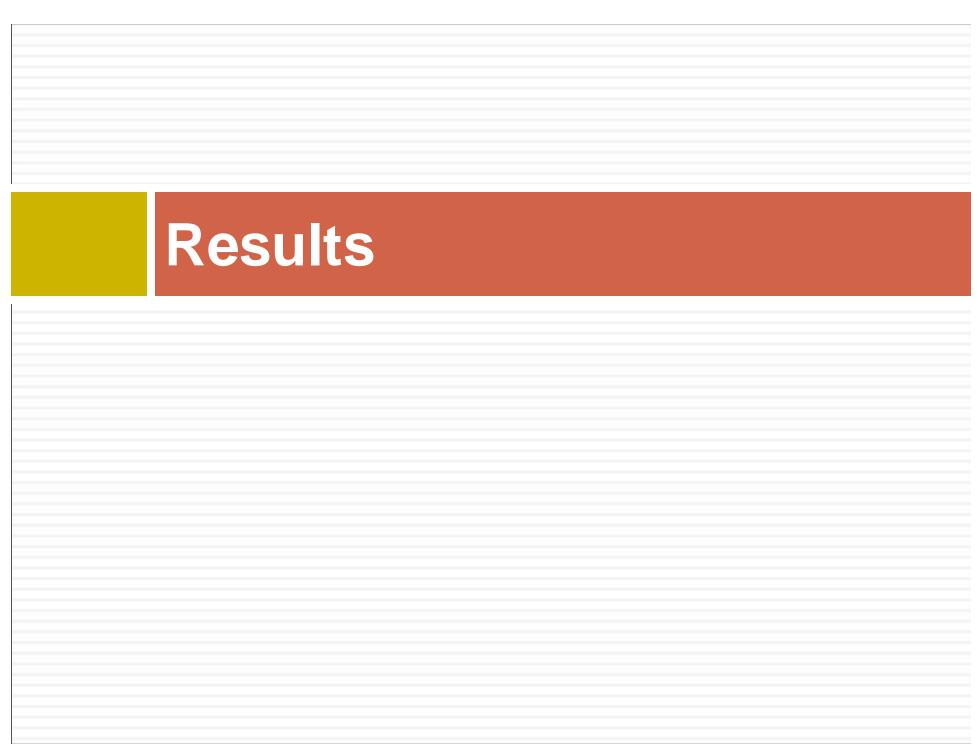
#### Intervention

- Presentation about 40 min
- Pre- and Post- surveys about 20 min
- Q&A after presentation
- A listing of resources where participants could request more information or obtain free screening tests

# Objectives of the educational presentation

- Review the most prevalent cancers in Hispanic women,
- Inform about primary prevention strategies (healthy diet, exercise, weight loss, safe sex, and smoking cessation), possible warning signs and symptoms,
- Recommendations for screening tests (pap smear, mammography, and colonoscopy)

Do you have any screen captures of what was covered?



# Demographics

Age (mean = $36.6$ years)	<30 years old	38.1%
	30 ~ 39	23.8%
	40 ~ 49	22.2%
	50 years and older	15.9%
Annual Gross Household Income	<\$10,000	28.1%
	\$10,000 ~ 20,000	46.9%
	\$20,000 ~ 30,000	9.4%
	≥ \$30,000	15.5%
Education	≤ 8 years	19.4%
	8~12 years	31.3%
	12 years	26.9%
	> 12 years	22.4%
English Proficiency	fluently	4.4%
	not fluently	11.8%
	only a little	61.8%
	Doesn't speak	22.1%
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# Demographics

Marital Status	Married Single, never married Living with partner Widowed, divorced, separated	41.2% 25% 17.6% 16.2%
Employment Status	Full-time Part-time Self employed and other Not employed	46.5% 14.5% 11.5% 27.5%
Born Outside U.S. Country of Origin, if not U.S	El Salvador Colombia Honduras Mexico	68.4% 34.8% 13% 17.4% 8.7%
Years lived in the U.S., if born elsewhere	≤ 1 year  2~5 years  6~20 years  >20 years	20.6% 32.3% 33.9% 13.2%

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# Health Care Utilization and Health Behavior

Screening Test	Ever had mammography *	61.30%
	Ever had pap smear	84.70%
Health Care Utilization	Get regular check-ups	43.30%
	See doctor only when sick	34.30%
	Do not get any health care	22.40%
Lifestyle Health Behavior	Exercise regularly	28.80%
	Smoke	8.20%
	Eat healthy diet	39.70%
	Use condoms regularly	24.70%

<sup>\*</sup> Only women over 40 years of age

# Pre- and Post-Test Knowledge Scores

Knowledge about Signs and Symptoms of Cancer	Pretest	Posttest
Irregular rectal bleeding	35.60%	79.50%
Irregular vaginal bleeding	37.00%	74.00%
Cough that will not clear	32.90%	68.80%
Bloating or abdominal distension	34.20%	67.10%
Lump in the breast	45.20%	80.80%
Average score for matched t-test*	1.85	3.67
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Knowledge about Cancer Risk Reducing Behavior	Pretest	Posttest
Get regular physical exercise	46.70%	86.30%
Get regular physical exercise	46.70%	86.30%
Get regular physical exercise Use condoms / avoid risky sexual behavior	46.70% 35.60%	86.30% 64.40%
Get regular physical exercise Use condoms / avoid risky sexual behavior Do not smoke	46.70% 35.60% 71.20%	86.30% 64.40% 89.00%

<sup>\*</sup> P-value < .001

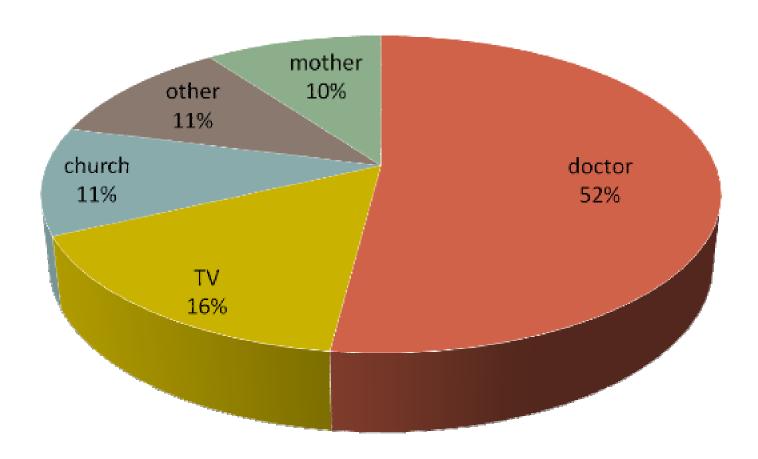
#### Effects of the education

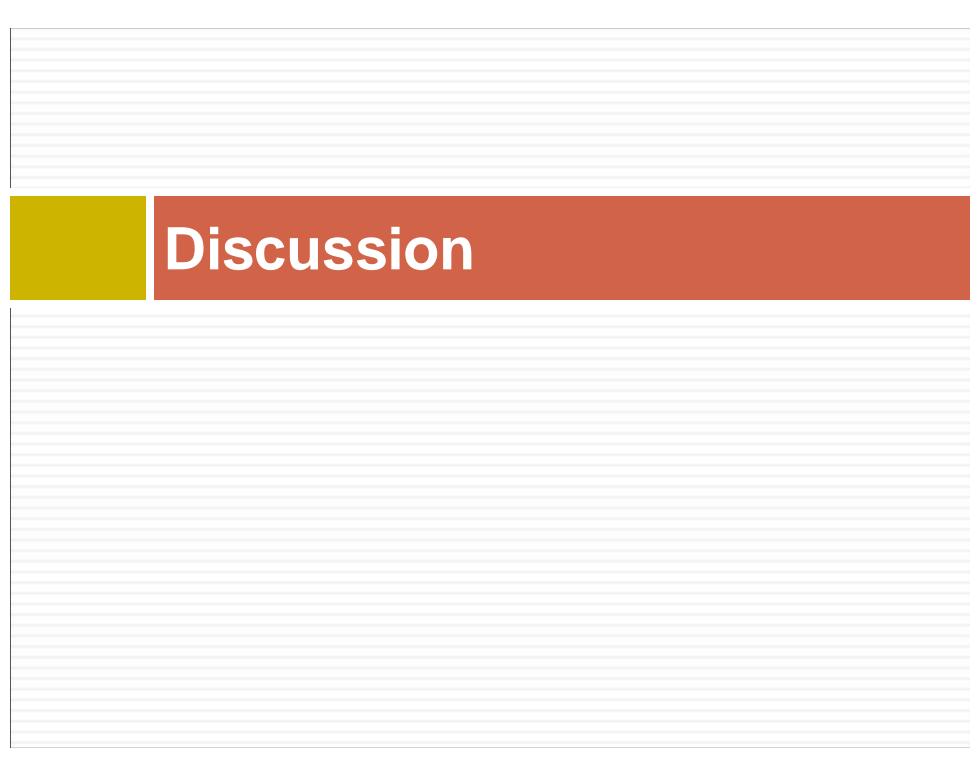
- High perceived value: "Learned a lot about cancer and its prevention" 93.2% (strongly agree/agree)
- Effect on planned behavior: "Plan to follow cancer screening guidelines"89% (strongly agree/agree)

## **Barriers to Cancer Screening**

Access to Health Care	Don't have health insurance	53.4%
	Can't afford the screening tests	46.6%
	No transportation to clinic	9.6%
	Long wait	6.8%
	Have health insurance, but no doctor accepts it	6.8%
Knowledge about Cancer Screening	Didn't think it necessary for me	26%
	Never heard about screening tests before	19.2%
	Heard about screening, but didn't understand it	13.7%
Attitudes Toward Cancer Screening	Too busy to get the screening tests	15.1%
	Scared of the test results	12.3%
	Afraid tests are painful or harmful	5.5%

#### **Sources of Health Information**





### Limitations

- Small sample size
- Lack of long-term follow up
- Selection bias

#### Conclusion

- Culturally-sensitive presentation improved the participants knowledge about cancer signs and symptoms and behaviors that decrease cancer risk
- Financial limitations and lack of knowledge of cancer symptoms and prevention are the major barriers to receiving cancer screening services
- Increasing the availability of free screening tests without educating the population is not sufficient