HDPulse

An Ecosystem of Health Disparities and Minority Health Resources

Intervention IP-081: De Casa en Casa: Cervical Cancer Screening in West and South Texas

Summary

The De Casa en Casa program is a theory-based, multicomponent, and culturally tailored cervical cancer screening intervention that addresses barriers to screening to increase screening rates among predominantly Latinix women along the US-Mexico border. The program provided bilingual health education, no-cost screening and diagnostic services, and navigation services for women 21 to 65 years old who are uninsured or underinsured. Study findings showed that culturally appropriate group education targeted to Hispanic women is as effective as individual education.

Overview

Purpose of Intervention:

To improve cervical cancer screening uptake among Latinx women in West and South Texas and determine whether individual or group education was more effective at increasing screening rates

Intervention Type:

Research-Tested — *Interventions with strong methodological rigor that have demonstrated short-term or long-term positive effects on one or more targeted health outcomes to improve minority health and/or health disparities through quantitative measures; Studies have a control or comparison group and are published in a peer-review journal; No pilot, demonstration or feasibility studies.*

Intervention Details

Intervention was Primarily Driven, Led, or Managed by:

Both Community and Academic/Clinical Researchers

Citations:

- Shokar NK, Calderon-Mora J, Molokwu J, Byrd T, Alomari A, Mallawaarachchi I, Dwivedi A. Outcomes of a Multicomponent Culturally Tailored Cervical Cancer Screening Intervention Among Underserved Hispanic Women (De Casa en Casa). Health promotion practice. 2021 Jan;22(1):112-121. Epub 2019 Dec 24.
  Relevance: Post-Intervention Outcomes, Main Intervention

- Calderón-Mora J, Byrd TL, Alomari A, Salaiz R, Dwivedi A, Mallawaarachchi I, Shokar N. Group Versus Individual Culturally Tailored and Theory-Based Education to Promote Cervical Cancer Screening Among the Underserved Hispanics: A Cluster Randomized Trial. American journal of health promotion : AJHP. 2020 Jan;34(1):15-24. Epub 2019 Aug 27.
  Relevance: Post-Intervention Outcomes
- Calderón-Mora J, Alomari A, Shokar N. Comparison of Narrative Video and Flipchart Presentation to Promote Cervical Cancer Screening Among Latinas Along the Border. Health education & behavior : the official publication of the Society for Public Health Education. 2022 Feb 3: 10901981221074918. Epub 2022 Feb 3.
  Relevance: Evaluations and Assessments

Adaptation of Another Research-based Intervention:

Yes

Name of Original Intervention:

AMIGAS (Ayudando a Las Mujeres con Información, Guía y Amor para su Salud)

Name of Original Intervention Author:

Theresa L. Byrd, DrPH, RN; Dean, School of Health Professions at University of Texas at Tyler

URL to original Intervention:

https://www.cdc.gov/cancer/cervical/amigas/index.htm

Citations:

- Byrd TL, Wilson KM, Smith JL, Coronado G, Vernon SW, Fernandez-Esquer ME, Thompson B, Ortiz M, Lairson D, Fernandez ME. AMIGAS: a multicity, multicomponent cervical cancer prevention trial among Mexican American women. Cancer. 2013 Apr 1;119(7):1365-72. Epub 2012 Dec 21.
- Smith JL, Wilson KM, Orians CE, Byrd TL. AMIGAS: building a cervical cancer screening intervention for public health practice. Journal of women's health (2002). 2013 Sep;22(9):718-23. Epub 2013 Aug 9.
- Byrd TL, Wilson KM, Smith JL, Heckert A, Orians CE, Vernon SW, Fernandez-Esquer ME, Fernandez ME. Using intervention mapping as a participatory strategy: development of a cervical cancer screening intervention for Hispanic women. Health education & behavior : the official publication of the Society for Public Health Education. 2012 Oct;39(5):603-11. Epub 2012 Mar 1.

Intervention Primary Outcomes were comparable to the original:

No

Specify*:

The original program did not provide any clinical services. Therefore, only intention to be screened could be measured. In De Casa en Casa, we were able to measure actual completion of screening.

Contact Information

Primary Contact Name:

Jessica Calderon-Mora

Primary Contact Affiliation:

The University of Texas at Austin Dell Medical School

Intervention URL:

https://ebccp.cancercontrol.cancer.gov/programDetails.do?programId=35029701

Primary Contact Email:

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Primary Contact Phone Number:

915-443-0272

Results

Intention

Improve minority health or the health of other populations with health disparities (e.g. rural populations, populations with low SES)

Intervention Primary Outcome:

Cervical cancer screening

Intervention Secondary Outcome:

Attitudes and beliefs

Key Findings:

We enrolled 300 women;150 in the group education (intervention) arm and 150 in the individual education (control) arm. Of all the participants, 85.7% completed the follow-up survey. Differences in screening rate at follow-up were analyzed by education type. Overall screening rate at follow-up was 73.2%; no significant difference by education type (individual: 77.6%, group: 68.9% P=.124). There were significant increases among group education at follow-up for knowledge (regression coefficient =0.79, P<.001), perceived susceptibility (regression coefficient =0.54, P<.001), perceived seriousness (regression coefficient =0.26, P<.001), and significant decrease for perceived benefits (regression coefficient =-0.63, P=.026).

Statistical Method Used:

Descriptive statistics were used to summarize demographic characteristics. Responses from items for each behavioral construct were summed and averaged to create a scale score. Change scores were calculated by subtracting the baseline score from the 4-month follow-up survey score. Relative risk (RR) regression analyses were conducted to assess the unadjusted and adjusted effects of group education on the uptake of screening compared to individual education.

Statistical methods used to analyze data:

The primary difference between the main intervention paper and the paper comparing group vs. individual education was that the main intervention paper utilized self-reported screening completion whereas the group vs. individual education paper utilized actual pathology results as the outcome. Self-reported data were used initially due to lack of EMR data being available at the time. Actual statistical analysis was similar for both papers; however, the primary outcome differed as described.

Evaluations and Assessments

Were Any of the Following Assessments Conducted (Economic Evaluation, Needs Assessment, Process Evaluation)?:

No

Demographic and Implementation Description

Diseases, Disorders, or Conditions:

Cervical Cancer

Race/Ethnicity:

Hispanic or Latino, White

Populations with Health Disparities:

People with Lower Socioeconomic Status (SES), Racial and Ethnic Minority Populations, Underserved Rural Communities

Age:

Young Adults (18 - 39 years), Middle-Aged Adults (40 - 64 years)

Socio-demographics / Population Characteristics

Community Type:

Rural, Urban / Inner City, We included colonias within El Paso County Texas.

Other Populations with Health Disparities:

People with Low Education

Geographic Location:

Texas

Socio-Economic Status:

Low SES

Minority Health and Health Disparities Research Framework

		Levels of Influence			
		Individual	Interpersonal	Community	Societal
Determinant Types	Biological	✔	✔		
	Behavioral	✔	✔		✔
	Physical / Built Environment	✔	✔	✔	
	Sociocultural Environment	✔	✔	✔	✔
	Health Care System	✔	✔		

Community Involvement

The community's role in different areas of the Intervention (Choices are "No Role", "Participation", and "Leadership"):

Design:

Participation

Dissemination:

Participation

Evaluation:

Participation

Implementation:

Participation

Outreach:

Participation

Planning :

Participation

Recruitment:

Participation

Sustainability:

Participation

Characteristics and Implementation

Intervention Focus Area:

Behavior Change

Disease Continuum:

Secondary Prevention

Delivery Setting:

Clinic / Health Care Facility, Home, Local Community (e.g. Barbershops, Beauty / Hair Salon, Laundromats, Food Markets, Community Centers), Parks and Recreation, Houses of Worship, Schools / Colleges

Mode of Delivery:

In-person

Who delivered the Intervention?:

Community Health Worker/Promoters

Conceptual Framework

Intervention Theory:

Health Belief Model, Social Cognitive / Social Learning Theory, Theory of Reasoned Action / Planned Behavior

Intervention Framework:

Social Ecological Model

Implementation

Intervention Study Design:

Cluster Randomized Controlled Trial

Targeted Intervention Sample Size:

300

Actual Intervention Sample Size:

257

Start Year:

2013

End Year:

2016

Intervention Exposures

Duration of Intervention/How Long it Lasted:

4-6 months

Frequency of Intervention Delivery:

Once

Number of Sessions/Meetings/Visits/Interactions:

1-2 Sessions

Average Length of Each Session/Meeting/Visit/Interaction:

1-2 Hours

Format of Delivery:

Group (e.g. Community leaders), Individual

Highest Reading Level of Intervention Materials Provided to Participants:

Grade 6-7

Adaptations and Modifications

Were modifications made?

Intervention Elements	Modified
Content	Yes
Context	Yes
Implementation	Yes
Funding	Yes
Organization	Yes
Participants	Yes
Providers	No
Sociopolitical	No
Stages of Occurrence	Yes

Modification Details

	Explanation
Content	
Adding Elements, Tailoring, None	For the De Casa en Casa program, we updated and revised the implementation guide used to train community health workers. We also adapted the AMIGAS flipchart presentation and narrative educational video to ensure it had updated cervical cancer screening guidelines, recent statistics, and included new infographics that were more interactive. We created shorter videos that were used as part of the education and adapted the flipchart presentation to a PowerPoint slide presentation.
Context	
Format, None	As a result of changing cervical cancer screening guidelines, we updated all guideline information to ensure it was current. We also updated statistics on incidence, mortality, and survival. Finally, we created new, modern, interactive infographics and narration that were included within the educational video.
Implementation	
Delivery, Exposure, Study Design	The implementation was essentially the same as was done for AMIGAS with enrollment and education conducted by a community health worker. For one of the research studies, we did randomize participants to group or one-on-one education based on recruitment site. Sessions were facilitated in an identical manner with the only difference being that groups were able to have interactive discussions.
Funding	
State Government	The AMIGAS program was funded through the Centers for Disease Control and Prevention, whereas the De Casa en Casa program was funded through Cancer Prevention and Research Institute of Texas.
Organization	
Location	The De Casa en Casa program recruited from community-based organizations, academic health centers, faith-based organizations, and community healthcare centers.
Participants	
None	The AMIGAS program was unable to provide screening services. Therefore, the De Casa en Casa program differed in that it prioritized women who were 21 to 65 years old, were uninsured and underinsured, and who had not had a Pap smear in the past 3 years.
Stages of Occurrence	
Implementation, Planning/Pre-implementation/Pilot	The intervention was modified for De Casa en Casa during the planning and pre-implementation stages through tailoring and development of the implementation guide, presentation, and educational video, as well as

	Explanation
	through the implementation phase where the video could be shown on a tablet or mobile device as it was available online. In the original AMIGAS program, it was shown in waiting rooms or dedicated community centers and was not available online.

Impact, Lessons, Components

Produced an impact or change beyond the primary or secondary outcome:

Yes

As a result of our findings, we recognized that participants could receive health education in a group setting. This allowed our program CHWs to provide health education to women needing cervical cancer screening in a group, rather than one-on-one. This was especially helpful during the pandemic when many Pap test appointments were canceled, but our CHWs would find groups of women at community events or health fairs and could provide a group presentation using our health educational materials.

Essential Aspects for Success:

Facilitation of the health education components by the CHW is critical for its success in immigrant, low socioeconomic status, and underserved populations. Our CHWs were hired from the very communities we served, therefore providing relatability and stronger rapport with participants.

Intervention Impact:

As a result of our findings, we recognized that participants could receive health education in a group setting. This allowed our program CHWs to provide health education to women needing cervical cancer screening in a group, rather than one-on-one. This was especially helpful during the pandemic when many Pap test appointments were canceled, but our CHWs would find groups of women at community events or health fairs and could provide a group presentation using our health educational materials.

Lessons Learned

Key Lessons Learned and/or Things That Could be Changed or Done Differently:

The most important takeaway is that group education is as effective as one-on-one education in increasing cervical cancer screening completion rates.

Insights Gained During Implementation

Insight Category	Insight Description
Cost of Implementing or Sustaining	Although no formal cost-effective analysis was conducted, our findings indicated that any health educator or other staff providing health education would be able to deliver cervical cancer education in a group setting, rather than just one-on-one, which is practical and requires less staffing.
Logistics	We experienced loss to follow-up for the 4-month follow-up survey due to change in phone numbers, participants moving, or no answers or call-backs. This is not uncommon, however, it may be helpful to also obtain e-mail addresses from all participants so that a link to the survey can be e-mailed.
Administrative Resources	We learned that less staffing would be needed to facilitate the health education as we found that group education in groups no larger than 9 women were successful in increasing screening completion. It was also helpful for the CHWs to build a relationship with the staff of recruitment sites.
Equipment / Technologies	Through other related studies, we found that the video or flipchart could be shown online with no CHW facilitation and this method proved to also be successful in increasing screening completion. This could be via a YouTube link or link to the program website.
Training / Technical Assistance	Through this study and others, we learned that 2-3 days of training, role-playing, and shadowing of CHWs or other staff who would deliver the education would be sufficient to provide the appropriate message in a consistent manner.
Transportation	In further studies evaluating our health education materials, we found that providing a link to our narrative educational video was successful at increasing screening completion with no interaction with a CHW. Therefore, women would not have to travel to a site to receive the health education.
Staffing	e learned that less staffing would be needed to facilitate the health education as we found that group education in groups no larger than 9 women were successful in increasing screening completion.
Recruitment	Through this study, as well as through observation of our CHWs, we learned that building rapport with participants prior to introducing the study allowed for more successful enrollment outcomes.

Intervention Components

Intervention Has Multiple Components:

Yes

Assessed Each Unique Contribution:

No

Products, Materials, and Funding

Expertise, Partnerships, and Funding Sources

	Used for Implementation	Needed for Sustainability
Expertise		
Clinical Care	Yes	Yes
Health Education / Health Literacy	Yes	Yes
Key informants, Tribal leaders, Community gatekeepers	Yes	Yes
Patient Navigation	Yes	Yes
Research/Data science	Yes	Yes
Translation/linguistics	Yes	Yes
Community mobilization, community organization/coalition building	Yes	Yes
Partnerships		
Universities	Yes	Yes
Community groups (e.g. faith-based organizations, barbershops, beauty-salons, laundromats, food markets, community centers, cultural associations, tribal groups)	Yes	Yes
Health care facilities (local clinics)	Yes	Yes
Media outlets (print/broadcast/social media)	Yes	Yes
School system (e.g. school administrators, health educators, daycares, preschools, private & public schools)	Yes	Yes
Funding Sources		
Public funding (e.g., federal, state or local government)	Yes	No

Product/Material/Tools

	Tailored For Language	Language(s) if other than English	Material
Outreach/Recruitment Tools			
Enrollment Packet [English]: Eligibility Form, Intake Form/Risk Factor Survey, Service Consent Form, Education Session Form, Screening Process Form, Promise Sheet, Promotional Flyer, Educational Leaflet, Resource List	No		Attachment available for request at the bottom of the page.
Enrollment Packet [Spanish]: Eligibility Form, Intake Form/Risk Factor Survey, Service Consent Form, Education Session Form, Screening Process Form, Promise Sheet, Promotional Flyer, Educational Leaflet, Resource List	Yes	Spanish	Attachment available for request at the bottom of the page.
Participant Educational Tools			
Videos	No		https://youtu.be/TCI-DbrMIR4
Videos	Yes	Spanish	https://youtu.be/IDzXfmM4Z5c
Videos	No		https://youtu.be/intZwfwiF-Y
Videos	Yes	Spanish	https://youtu.be/2CGdVlucg3U
Videos	No		https://youtu.be/xe0d96SRuGk
Videos	Yes	Spanish	https://youtu.be/8__GS_46h30
Flipchart Presentation [English]	No		Attachment available for request at the bottom of the page.
Flipchart Presentation [Spanish]	Yes	Spanish	Attachment available for request at the bottom of the page.
Measurement Tools			
Standardized Instrument/Measures	No		Attachment available for request at the bottom of the page.

	Tailored For Language	Language(s) if other than English	Material
Standardized Instrument/Measures	Yes	Spanish	Attachment available for request at the bottom of the page.
Standardized Instrument/Measures	No		Attachment available for request at the bottom of the page.
Standardized Instrument/Measures	Yes	Spanish	Attachment available for request at the bottom of the page.
Standardized Instrument/Measures	No		Attachment available for request at the bottom of the page.
Standardized Instrument/Measures	Yes	Spanish	Attachment available for request at the bottom of the page.

Implementation Materials and Products

	Material
Implementation/Delivery Materials	
Coordinator or Facilitator's Guides	Attachment available for request at the bottom of the page.
Implementation/Output Materials	
Websites (include URL/link)	https://ebccp.cancercontrol.cancer.gov/programDetails.do?programId=35029701
Social/traditional media publicity/news coverage	https://www.facebook.com/CPEP.DeCasa/
Social/traditional media publicity/news coverage	https://www.instagram.com/decasaencasa_ttuhscep/?hl=en
Websites (include URL/link)	https://elpaso.ttuhsc.edu/som/family/CPP/de-casa-en-casa/default.aspx

Articles Related to Submitted Intervention

	Article
Reports/Monographs	
No Reports/Monographs provided.	
Additional Articles	
Evaluation, Cost-related	Attachment available for request at the bottom of the page.
Evaluation	Attachment available for request at the bottom of the page.
Qualitative findings	https://pubmed.ncbi.nlm.nih.gov/33121254/

Materials Available for Request

- Recruitment Material [Eng.].pdf
- Recruitment Material [Span.].pdf
- FlipChart Presentation English [Promotora].pdf
- Cervical Cancer Awareness Month Presentation [Spanish].pdf
- De_Casa_Research_Survey_English_.pdf
- De_Casa_Research_Survey_Spanish.pdf
- De_Casa_Post_Immediate_and_4_month_follow_up_Survey_English.pdf
- De_Casa_Post_Immediate_and_4_month_follow_up_Survey_Spanish.pdf
- Post_education_DE_CASA_satisfaction_survey_English.pdf
- Post_education_DE_CASA_satisfaction_survey_Spanish.pdf
- Training Material.pdf
- De Casa - Grp. vs Ind. [2019].pdf
- De Casa Paper 2021.pdf

Request Materials

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