

# Evaluation of a *Radionovela* to Promote HPV Vaccine Awareness and Knowledge among Rural Hispanic Parents



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## Introduction

To ensure that racial and ethnic disparities in cervical cancer incidence and mortality do not widen over time, targeted HPV vaccine education programs are needed.

Latinas have nearly a two fold higher incidence of cervical cancer compared to non-Hispanic white women.

In 2006 & 2009, the CDC approved new HPV vaccines for young women against HPV-16 and HPV-18 (causes 70% of cervical cancer cases).

The CDC recommends the HPV vaccine for females at ages 11 and 12 years old but it can also be given at ages 9 – 26.

An HPV vaccine *radionovela* may be a culturally-appropriate strategy to increase awareness of and interest in HPV vaccination among Latino parents with lower levels of literacy and English language ability.



## Results

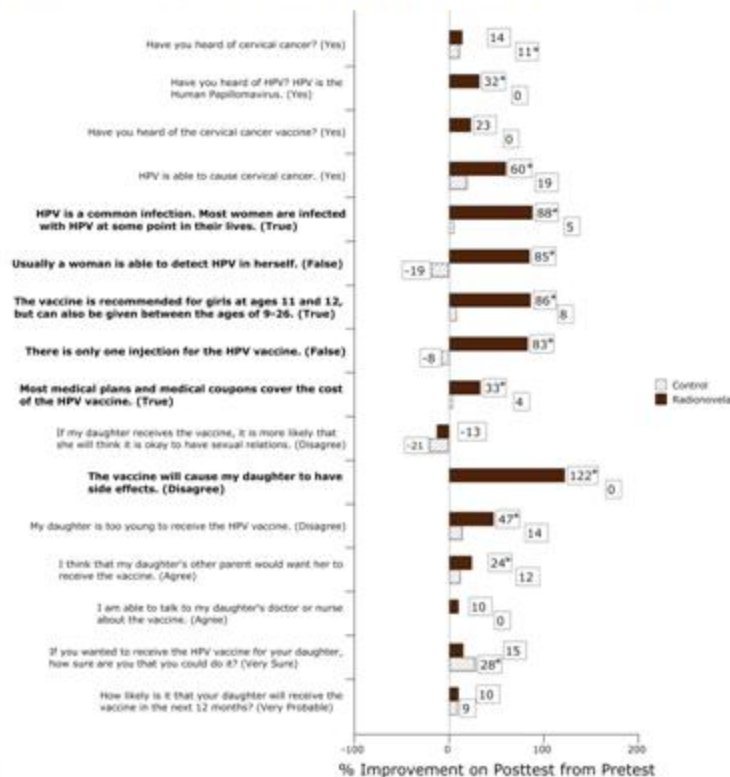
Table 1. Demographic Characteristics of Participants\*

	Total (n=88)	Intervention (n=46)	Control (n=42)
<b>Age</b>			
Mean Age (SD)	36.0 (9.2, 8.0)	36.0 (9.2, 8.0)	40.2 (9.2, 9.1)
Age Range (y)	22-62 (81)	22-62 (41)	22-61 (41)
<b>Gender (n)</b>			
Female	78	42 (27)	36 (21)
<b>Age of Daughter† (n)</b>			
Age 9-10	47% (24)	49% (12)	51% (21)
Age 11-12	34% (29)	30% (10)	32% (13)
Age 13-14	27% (23)	29% (13)	24% (10)
Age 15-17	38% (33)	30% (10)	42% (17)
<b>Resided in Living or Moved to Yakima (n)</b>			
Yes	72% (62)	51% (23)	71% (29)
Yes	71% (59)	72% (31)	69% (29)
<b>Income (n)</b>			
Less than \$20,000	61% (43)	69% (27)	54% (22)
\$20,000 - \$45,000	20% (12)	20% (11)	27% (11)
\$45,000 or more	24% (20)	27% (12)	20% (8)
<b>Years of Education (n)</b>			
Mean years of education (SD)	9.4 (3.2, 4.4)	9.4 (3.2, 4.1)	10.5 (3.2, 4.9)
Range (y)	6-16 (75)	7-16 (41)	9-16 (41)
<b>Country of Birth (n)</b>			
United States	28% (24)	27% (10)	24% (14)
Mexico	72% (62)	73% (30)	69% (27)
<b>Average Years of School (n)</b>			
Mean years (SD)	19.2 (3.2, 3.4)	18.3 (3.2, 3.9)	19.2 (3.2, 3.9)
Range (y)	1-50 (50)	1-47 (46)	2-50 (42)
<b>Parent/Country of Birth (n)</b>			
United States	12% (11)	11% (5)	10% (5)
Mexico	87% (77)	89% (41)	84% (37)
<b>Self-Administration Status (n)</b>			
High Language Proficiency	41% (36)	41% (19)	41% (17)
Low Language Proficiency	59% (52)	59% (27)	59% (25)

\*Significant or trend toward significance appropriate to test for differences between the intervention and control group by demographic characteristics. †Differences were found between the two groups.

††Significance for age of daughter are not mutually exclusive.

Figure 1. Changes in Knowledge and Beliefs from Pretest to Posttest: *Radionovela* vs. Control



**Black Bold:** Intervention (*Radionovela*) had greater improvement from pretest to posttest than the control arm as measured by generalized estimation equation (GEE) methodology at  $p < .05$ .

\*Improvement was shown on the posttest from the pretest as measured by McNemar's Paired Test (Pretest vs. Posttest) at  $p < .05$ .

## Yakima County, WA



## Conclusion:

These findings indicate that a *radionovela* improves knowledge of HPV and the HPV vaccine among Latino parents.

*Novelas* represent a culturally tailored mechanism to convey HPV and HPV vaccine information in a meaningful style that may significantly raise cervical cancer, HPV, and HPV vaccine awareness and interest among Latino parents.

Use of culturally-tailored strategies has strong potential for improving HPV vaccine uptake among US Latinas, one of the ethnic groups at high risk for cervical cancer incidence and mortality in the United States. Further evaluation activities are needed.

## Acknowledgements:

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## Study Objective:

This study aims to investigate the efficacy of messages developed in the form of a *radionovela* to improve HPV and HPV vaccine awareness, knowledge, interest, and attitudes compared to a control radio announcement among rural Latino parents of daughters aged 9-17.

## Methods

From July - September 2009, Spanish-speaking Latino parents or guardians of daughters aged 9-17 were recruited at local community events to participate in an evaluation of the efficacy of HPV vaccine education messages included in a locally produced *radionovela*.

This took place in the Lower Yakima Valley, WA, a region that includes many small agricultural communities that is more than 50% Mexican American.

Using headsets, participants were randomized to listen to either the *radionovela* or to control radio programming and completed an audio pretest and posttest designed for low literacy levels.

In a mini-drama format that includes dialogues between a Latina daughter, her family, a nurse, and a pediatrician, the *radionovela* highlights facts and concerns about cervical cancer, HPV, and the HPV vaccine and decision making processes related to vaccine uptake.

McNemar chi-square tests were used to investigate changes from pretest to posttest in the intervention and control groups and generalized estimation equations (GEE) were specified to assess group by time differences. STATA 10.0 was used to conduct all statistical analyses (College Station, Texas).