An Edutainment Tool for Increased Compliance with DR Screening and Management, Part 2: Efficacy Study

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Purpose

Objective

To study the efficacy of a culturally competent fotonovela on diabetic retinopathy (DR) screening compliance.

To utilize the Knowledge, Attitudes and Practices (KAP) survey created in previous field-testing [1].

To implement the fotonovela for DR screening using two different scenarios:
- Four public mobile screening events at community centers in Albuquerque, New Mexico (NM).
- Weekly screening at a clinic within the federally funded primary care system of CommuniteHealth Centers in San Antonio, Texas (TX).

Background

Hispanics in the United States, especially those of Mexican descent, suffer from high rates of eye disease and visual impairment [2, 3].

A method to increase compliance (Fig. 1) with annual eye exams and healthy lifestyle will significantly cost-saving to the national health-care system.

Fotonovelas are small, visually compelling booklets that have evolved into an edutainment tool for communicating important health messages.

Figure 1 shows the relationships in this translational research between VisionQuest Biomedical, the originator of the fotonovela tool, Community Health Workers (Promotores), and Health Care Providers.

Methods

Data

- 384 individuals attended four public retinal screening events in Albuquerque, NM.
- 75 patients with diabetes participated in the study at the Barrio Family Health Center / CommuniteHealth Centers in San Antonio, TX.

Albuquerque, New Mexico - Recruitment

- Three Promotores randomly distributed 400 fotonovelas (Fig. 2) over four weeks to the Hispanic community at large.
- A “Call to Action” toll-free appointment number was embedded in the fotonovela with an invitation to a free retinal screening.
- Four day-long public retinal screening day-long events were scheduled at La Plaza de Encuentro, and Parents Reaching Out, two networking organizations for New Mexico families (Fig. 3).
- 100 control announcement flyers with the screening locations and times were randomly distributed by the promotores.
- Promotores were instructed not to influence the recipients with additional explanations, educational information or “sales pitch” pressure.

Albuquerque, New Mexico - Recruitment (continued)

- 75 fotonovelas and copies of the KAP surveys were given to individuals with diabetes by the Barrio Family Health Center (Fig. 4) primary care doctor along with a retinal screening appointment.
- Appointment date reminders and a notice of a small incentive, a $10 Walgreens gift card, were embedded in each recipients fotonovela.

San Antonio, Texas - Recruitment

- 75 fotonovelas were given to each participant on the day of retinal screening.
- Promotores were an invaluable resource.
- In TX, gift cards were advertised; no-shows were eliminated.

Results

Table 1. Total subjects screened during Fotonovela Compliance test in Albuquerque New Mexico.

<table>
<thead>
<tr>
<th>Type of pre-retinal screening contact</th>
<th>No. of subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Received fotonovela and called toll-free number for appointment</td>
<td>140</td>
</tr>
<tr>
<td>Received fotonovela and walked in</td>
<td>110</td>
</tr>
<tr>
<td>Received fotonovela secondhand and called</td>
<td>40</td>
</tr>
<tr>
<td>Received flyer and walked in</td>
<td>5</td>
</tr>
<tr>
<td>Present too late to be imaged</td>
<td>7</td>
</tr>
</tbody>
</table>

- Fotonovelas elevated awareness of retinal screening.
- There was a ripple effect on compliance in NM.
- Promotores were an invaluable resource.
- In TX, gift cards were advertised; no-shows were eliminated.

Conclusions

- This fotonovela study suggests using this method increases compliance with retinal screening by a significant margin.
- Promotores were an invaluable resource.
- This fotonovela study suggests using this method increases compliance with retinal screening in NM. The authors would like to thank The Fotonovela Company of Santa Fe; Dr. Winston Crandall, Ph.D., for his statistical analysis; Dr. Maria Santiago; and facilities Encuentro, Partnership for Community and Parents Reaching Out.

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