



ENGAGING EARLY CHILDHOOD EDUCATORS AND PARENTS WITH A *FOTONOVELA* INTERVENTION TO PREVENT INFECTIOUS DISEASE

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BACKGROUND

The Los Angeles County (LAC) Department of Public Health (DPH) Acute Communicable Disease Control Program (ACDC) Planning and Evaluation Unit staff initiates collaborative projects which aim to strengthen the community's capacity to prevent infectious disease by increasing community resiliency, building relationships with diverse stakeholders, and mobilizing targeted social networks to engage in evidence-based strategies.

Reptile-associated Salmonellosis

ACDC surveillance data indicate that LAC has consistently had significantly higher rates of reptile-associated salmonellosis (RAS) than the national average. Though usually considered a foodborne disease, reptile exposure accounts for 6% of total *Salmonella* cases nationally. In contrast, in LAC, rates linked to reptile exposure have accounted for 9.2%-10.5% of total reported cases over the past several years. Reported cases in LAC have been highest among low-income Spanish-speaking Latino families with young children who live in apartments in SPAs 2 and 4 who have had exposure to baby turtles as pets. Historically, small turtles have been popular pets in child care programs and preschool classrooms.

Interdisciplinary Collaboration

In 2007, ACDC staff established the Reptile-associated Salmonellosis (RAS) Working Group to address the consistently high rates of the disease in vulnerable communities where children ages 0-5 years are at risk of serious consequences if exposed to the bacteria. Working Group members aimed to work with stakeholders to change community norms and reduce demand to purchase baby turtles, sold illegally in swap meets, streets and open air markets of LAC. In 2008, Working Group members from ACDC, Veterinary Public Health, and other key DPH programs decided to approach and engage the early childhood education (ECE) provider community, to develop prevention messages, materials, and activities to reach the parents and children they serve.

Staff attended the Los Angeles County-wide Child Care Planning Committee, attended by diverse ECE stakeholders, providers, parents, and representatives of community-based organizations, and provided public health updates on a range of infectious disease prevention topics during these monthly meetings. In 2009, ACDC staff conducted field visits with selected providers to exchange information with center-based and family-based ECE programs [1]. These site visits helped to build relationships and better understand the critical roles that ECE providers play in bridging low-income families with needed health and social services.

METHODS

Fotonovela

In 2009, ACDC staff reached out to health communications faculty at a local university, who assigned selected students to assist with RAS Working Group efforts to develop a piece of relevant, culturally competent health education material for Latino parents. Research in diverse communities has shown that educational material such as comics, stories, and pictures can effectively reach Spanish-speaking individuals with health messages [2]., ACDC staff suggested that a *fotonovela* could be effective in reaching and engaging the target population, since this format is widely used in magazines, health literacy projects, and patient education on diverse topics.



With guidance and feedback from the RAS Working Group, the team of graduate public health students drafted, field tested, and produced a 12-page glossy bilingual photograph and story booklet *fotonovela* based on real life stories and a harm reduction approach entitled, “Danger: Turtles! Not a Kid’s Best Friend!; ¡Cuidado Con Las Tortugas! ¡No Son Las Mejores Mascotas Para Sus Niños!” [2]. ACDC allocated funding for a one-time printing of 10,000 color copies of the *fotonovela*.

Readers’ Theater

ACDC staff suggested that the RAS *fotonovela* be strategically disseminated in order to reach the targeted audience and achieve the most impact, circulating the *fotonovela* within the social networks of low-income Latino parents of young children. Staff researched the concept of readers’ theater, which has been successfully applied in group learning and problem-solving in the fields of education and community development, and then proposed applying this interactive method with *fotonovela* dissemination. In this way, ECE providers and parents would act out the story in front of groups of their peers. The readers’ theater would enable parents to understand the story and disease prevention message through a variety of adult learning methods: listening to the readers tell the story, looking at the photographs, reading, and sharing their thoughts to in a group discussion.

Stakeholder Assessment

ACDC staff identified, contacted, and telephoned ECE providers throughout LAC to determine if they held regular parent meetings, and if so, in what language(s), as well as if they thought a readers’ theater activity would be feasible for them to conduct during the course of the meeting. Staff determined the availability of selected ECE providers to participate in training-of-trainer (TOT) sessions, and when possible, scheduled field visits.

Tool Development

Staff sought ECE provider input on the development and revision of readers’ theater tools and engaged in Plan-Do-Study-Act (PDSA) cycles for quality improvement throughout the process [3]. Tools were developed in order to systematize the process for presenting and discussing the *fotonovela*, along with following up with ACDC after each readers’ theater session is facilitated. Three *fotonovela* project tools were developed to facilitate this intervention within the context of parent meetings of children ages 0-5 ages: 1) readers’ theater leaders’ guide, 2) group evaluation form, and 3) summary fax coversheet. Each of these tools had qualitative and quantitative elements. The leaders’ guide consisted of a checklist of steps to facilitate the intervention. The group evaluation form had five items (Table 2). The summary fax coversheet had program contact information, date of training, and a seven-item summary evaluation of readers’ theater numbers reached, challenges, successes, and next steps.

Training-of-Trainer Sessions and Follow-Up

Training-of-trainer sessions were planned, scheduled, and tracked on a Microsoft® Excel spreadsheet which included the date, ECE program name, number of *fotonovelas* and readers’ theater tools distributed, and the number of follow-up plans completed.

RESULTS

Nine ECE programs were contacted and assessed; all had parent meetings that were conducted in English and Spanish. All participated in on-site *fotonovela* TOT sessions, representing seven of the eight LAC service planning areas (SPAs). A total of 120 early childhood educators were trained; TOT sessions conducted had a range of 3-66 participants. Six of the nine ECE programs (67%) had previously participated in ACDC Program site visits in 2009 (See 2009 ACDC Special Studies Report). Each TOT session lasted one hour; during the training, the *fotonovela* and readers’ theater tools were introduced and the readers’ theater was enacted with ECE providers playing each of the roles. Group discussion was facilitated and *fotonovelas* were distributed.



Participating programs had a total of 3,421 enrolled children under the age of five years in 2010, and ranged from 14-1,440 per program. Five programs (56%) were center-based, one (11%) was family-based, and three (33%) were both center-based and family-based. Five programs (56%) were based in SPAs 2 and 4, where the most cases of RAS were reported.

Table 1. Characteristics of RAS *Fotonovela* Train-the-Trainers Participants

ECE Program	# Staff Trained	# of <i>Fotonovelas</i> Received	Service Planning Area (SPA)	Center-based, Family-based, or Both?	Participated in Site Visit in 2009?
A	11	400	2	Center	Yes
B	9	320	5	Both	Yes
C	26	900	3, 4, 6	Both	Yes
D	11	400	5	Center	Yes
E	3	20	7	Family	Yes
F	16	100	4	Center	Yes
G	24	1,600	2	Both	No
H	12	400	4	Center	No
I	8	150	8	Center	No
Total	120	4,290			

Data was collected and analyzed from 78 ECE providers (65%) of those who participated in TOT sessions. A total of 211 parents in ECE Program C were reached with the readers' theater intervention (in English, Spanish, Mandarin, and Cantonese). The other eight program sites did not have evaluation data available for analysis.

Results indicate that most participants, whether ECE providers or parents, had seen baby turtles for sale. They noted that they saw these pets illegally sold on the streets of LAC, at swap meets, downtown in Santee Alley, and in Chinatown shops. When asked if they knew about the problem of reptile-associated salmonellosis prior to the training, nearly one in three (67%) ECE providers responded yes, whereas only one in four (25%) parents knew. Nearly all ECE providers and parents pledged to avoid buying a pet turtle, thought that the *fotonovela* is a good teaching tool, and committed to sharing what they learned with family, friends, and neighbors.

Table 2. Responses of RAS *Fotonovela* Education Participants

Group Evaluation Item	ECE Providers (n=78)	Parents (n=211)
Have seen baby turtles for sale	90%	84%
Before this meeting, knew that turtles could make you sick	67%	25%
Will not buy pet turtle if asked by child	97%	96%
Think this <i>fotonovela</i> is a good way to learn about the problem of <i>Salmonella</i>	99%	99%
Will share what you learned with others	100%	99%

Following the readers' theater session, ECE Program C staff committed to reduce the risk of RAS in the community by taking the following actions: 1) policy change, prohibiting reptiles from the classroom; 2) give parents homework to read the *fotonovela* to their child; 3) add the *fotonovela* to the classroom library corners; and 4) spread the word by sharing the *fotonovela* with neighbors, friends, and relatives. During this project implementation, one Program C staff member took the initiative to translate the *fotonovela* dialogue into Chinese and gave training sessions in both Mandarin and Cantonese to the 26 Chinese family child care providers she coordinates.



DISCUSSION

This intervention reached the low-income Latino families with young children through their early childhood education programs. Parents need to be aware of the risk of exposing young children and other vulnerable family members to reptile-associated salmonellosis. Parents and ECE providers are interested in learning more about zoonotic diseases, animals and children's health, emergency preparedness, dog bite prevention, bats and rabies, lice, bed bugs, and other health and safety topics.

Benefits to Parents of Young Children

ECE providers valued the readability of the *fotonovela*. Many parents are bilingual, while some are monolingual (Spanish or English), and the format and group discussion was designed to be inclusive and build community; as one provider stated, "It doesn't embarrass anyone. You can't tell who can read and who can't read; they can follow the pictures at the same time as the scenes are played out." ECE providers appreciated the nonjudgmental attitude and approach in the *fotonovela* readers' theater. According to several ECE providers, the parents they serve on occasion express concerns and fears, such as being seen as a bad parent if they purchase a turtle for their child. Furthermore, ECE providers say that street vendors are often visible in the community, at parks, selling items in front of child care programs and schools, and that even they and their neighbors work as vendors in the informal economy.

Trainer comments included:

- "Overall delighted to play parts and to be informed."
- "Many were not aware of the dangers of the turtles...they will inform others around their community."
- "By the end of the workshop, some parents came to me and expressed that they gained knowledge...and they will share information with their kids and friends. They also expressed that the Chinese materials are very useful since they don't know English very well."
- "The (*fotonovela*) captures the attention...liked the vivid colors and pictures....will take extra copies to share with friends and relatives."
- "They (parents) loved the presentation... very interactive and the *fotonovelas* were very eye-catching."
- "Did not know that turtles could be so harmful to little ones."
- "Another parent said she will only buy plastic turtles or plush toys."
- "Great illustrations make you want to pick up the *fotonovela* and read it."
- "They enjoyed the process."
- "Great way to explain to others about it!"
- "I honestly thought that they're not just cute animals."
- "I think it's good for the intended audience."
- "Great tool to use with parents."
- "Very important information."

Challenges for ECE Providers

Many early childhood education providers identified several key barriers to implementing the *fotonovela* readers' theater. Increasingly significant are State budget cuts to ECE programs, which resulted in decreased funding for child care slots, subsequent lower enrollment, and reduced staffing; resulting in less staff time to devote to parent and health education activities. Furthermore, attendance at parent meetings can be low, since parents often work multiple jobs and struggle to find time to attend evening meetings while balancing family, work, school, and other commitments. Also, one ECE provider stated that following the *fotonovela* dialogue bubbles was initially a bit confusing



CONCLUSION AND RECOMMENDATIONS

This project aims to engage early childhood educators and parents in diverse communities throughout LAC through participation in a *fotonovela* readers' theater. Collaboration is critical in facilitating sustainable, culturally competent infectious disease prevention interventions.

Future strategies include involving ECE providers and parents in SPA 1, since Antelope Valley has not yet been reached through this project. Furthermore, the 42 ECE providers other than those in Program C in SPAs 2 through 8 who have been trained have not yet fully implemented the readers' theater; they will need to be reengaged, to the extent they are available, in the project. It would be strategic to roll-out the project to Head Start and Early Head Start programs through the Los Angeles County Office of Education's (LACOE) 28 delegate sites, which have both home-based and center-based programs serving low-income families. Efforts will be made to engage the incoming LACOE leadership in this effort.

One of the nine ECE programs, Program C, has been successful in effectively implementing the project as they had envisioned. Their staff has requested that additional parent education programming be developed, in the area of food safety. Initial collaborative planning meetings with ACDC and Program C staff indicate that adapting the *fotonovela* readers' theater method may be feasible and desired.

As *Healthy People 2020* affirms, it is vital to address the social determinants of health and health disparities to improve healthy working and living conditions for all. Collaborative disease prevention projects such as the *fotonovela* readers' theater aim to contribute to efforts to achieve health equity in LAC.

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RESOURCES

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2. Multilingual RAS prevention health education and outreach materials are available for download or ordering through the ACDC website, <http://www.ph.lacounty.gov/acd/HealthEdReptile.htm>
3. Healthy People 2020: www.healthypeople.gov