

ESAHEC & Chesapeake Multicultural Resource Center

Oral Health Literacy

Report for 2014

I. Project Identification

Project Title: ChesMRC Oral Health Literacy
Reporting Period: May to July 2014
Project Director: Jacob F. Frego
Contact information: (410) 221 2600
jholtz@esahec.org

II. Overview of the Project

This was the second year of activities made possible by funding from the Maryland Dental Action Coalition [MDAC] in partnership with the Eastern Shore Area Health Education Center [ESAHEC]. The purpose once again was to expand delivery of accurate oral health messages to young Hispanic children and their families. The emphasis of the ESAHEC and Chesapeake Multicultural Resource Center [ChesMRC] Oral Health Literacy Sessions was on prevention education and was designed collaboratively. Information grounded in evidence-based research was shared, and desired health outcomes were demonstrated. The goal was once again to increase awareness of best practices in oral health care in the home, in order to 1) prevent and control oral disease, especially early childhood caries, in young children in low-income households, and 2) reduce oral health disparities in the service area.

The target audience was migrant families: parents and their young children attending health promotion events at the ChesMRC in Easton, MD. Participants came from Talbot County.

III. Format of First Event: The Family Fun Night revolving around dental health information at the ChesMRC was held on June 3rd, 2014.

Three facilitators were present and shared responsibility for young children, teens and parents who were each presented with age-specific activities. This format was instituted because in Year 1 we learned that separating the children from their parents and focusing on appropriate activities helped to ensure a better learning atmosphere for all involved.

Children: Jeanie Holtz, RDH addressed the young children with Dental Health information in a visual and entertaining way. The children all understand English so no interpreter was necessary. The "Tooth Fairy's Helper", Jeanie Holtz addressed the youngest children, using puppets and incorporating songs makes it more appealing for that age group. Afterwards she organized an opportunity to play a hands-on age-appropriate game called "Feed *Mouthie* Sugar-Free Snacks" which was of great interest.

There were 19 young children signed in by their families at the event. The ages of the young children ranged from 4 to 10 years old.



Jeanie Holtz, RDH, speaking with youngest children at ChesMRC as the “Tooth Fairy’s Helper”

The Tooth Fairy’s Helper visits the Pre-K and Kindergarten students during school hours, and makes presentations to 1st graders in school. Thus the Family Night serves as a review of the information received to ensure that the key oral messages are repeated and fully understood.

Teens: Suzi Peel, ESAHEC Program Coordinator, answered questions for the adolescents and supervised as they played The Dental Jeopardy Game. Five of the teens stayed extremely focused on the activity while others wandered in and out. A focus on teens was added at this outreach event in an effort to deliberately engage and include them. As it is a Family Night, whole families do attend, and the primary focus is on the youngest children. All of the teens who participated in the game were girls.

Adults: Bonnie Dove, RDH, gave a presentation to the adult family members, parents as well as others (uncles, aunts, grandparents). The topics covered were the basic ways to protect a young child’s first teeth—limiting sharing of food and kissing, learning appropriate nutritional practices, hygiene and visiting a dentist at an early age—that are in the Pre- and Post-Tests. A ChesMRC staff member was present and helped ensure the parents were able to understand the messages and ask questions: this interpreter was an essential part of the presentation given to the parents by Bonnie Dove.

After the Dental Health Session, all participants, ChesMRC staff and volunteers, and the three presenters gathered for refreshments. Fresh fruit and fresh vegetable trays were served. Each child and family received dental care kits to take home.

IV. Outcomes

This format was a distinct improvement from Year 1 in which the children and parents were all together during the information session.

Before the event a pre-survey on dental health was distributed by the MRC staff to parents with instructions to complete it and return it during the June 3rd Family Fun Night in order to receive a \$5.00 gift card. This incentive aimed to attract and engage as many families as possible. The parents were asked to complete a post-survey after the presentation in order to receive their gift card.

17 pre-surveys were collected and 22 post-surveys were collected on the evening of the event. With this data the following conclusions were established.

The following topics were the least well understood:

- Drinking tap water is better than drinking bottled water.
- Brushing at bedtime is absolutely necessary even though brushing in the morning is done.
- It is not best to rinse after brushing with a fluoride toothpaste.
- Juice drinks composed of 100% fruit juice do contain sugar.

With these in mind it is hoped the RDH will have a chance to reiterate the importance of dental health information in the future with this group.

It is worth noting that the Tooth Fairy's Helper had visited the Pre-K and Kindergarten students during school in February 2014 and 1st graders in November 2013, so the Family Night was another chance for the children to review what they had seen, heard and learned.

V. Data

Pre-Tests were delivered to parents during the week prior to the Family Fun Night, with a note explaining that those who completed the Pre-Test at home and the Post-Test onsite would receive a \$5 Wal-Mart gift card.

The number of Pre-Test respondents was 17.

The number of Post-Test respondents was 22.

There were many families milling about, with children running and jumping and playing in a very relaxed atmosphere. The venue had two exits and there was no system set up to ensure that all questionnaires were received and logged. This will merit better attention in future events.

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2014**

Pre-Survey Results					Post-Survey Results		
Question #	Correct	Incorrect	No Answer		Question	Correct	Incorrect
1	14	2	1	How old should children be for first visit to the dentist? 3 years – 1 year – 12 years	1	22	0
2	15	1	1	If baby teeth get cavities, the permanent teeth are more likely to get cavities. True / False	2	21	1
3	14	2	1	Can you infect your child with cavity-causing germs? Yes/No	3	21	1
4	14	2	1	Can you die from a dental infection? Yes/No	4	21	1
5	9	8		How long should we brush teeth for? 1 min – 3 mins. – 2 mins.	5	16	6
6	8	9		Drinking bottled water is always better than drinking water from the tap. True / False	6	9	13
7	2	14	1	It is always best to rinse with water after brushing with a fluoride toothpaste. True / False	7	11	11
8	8	8	1	If you brush in the morning, brushing at bedtime is not necessary. True / False	8	9	13
9	10	7		Children should drink milk at bedtime. True / False	9	21	1
10	9	6	2	Juice drinks labeled "100% juice" have no sugar. True / False	10	12	10

VI. Analysis

The Pre-Tests show that certain answers [such as 1, 2, 3, 4] were already well-understood by family members.

Certain messages were accurately understood immediately [such as 9].

Certain questions continue to pose difficulties to the respondents, such as 6 which contrasts tap water and bottled water. This is likely due to the practices that were instilled in parents in their country of origin where tap water was not considered as safe as bottled water. Indeed this assumption is confirmed by the fact that parents nearly always declare that water must be boiled before it is given to a young child.

Certain messages will need to be repeated several times [such as 7]. The fact that it is not advisable to rinse after brushing with a fluoride toothpaste is not well understood at all.

VII. Format of second event: Pregnant mothers:

On July 30th 2014 Jeanie Holtz, RDH, returned to speak with the group of pregnant women about oral health at the ChesMRC Pre-Natal Class.

Every Wednesday the Multicultural Resource Center has an informative class designed specifically for expectant women and/or new mothers. On July 30, 2014 Jeanie Holtz, RDH was able to address those women who attended. It appeared that some were not pregnant and some brought their children or babies with them.

Number of participants started at nine, and two more mother arrived late. The participants completed a Pre-Test and 9 were collected. The presentation included the topics covered by the survey plus the visual aid display of common drinks and the amount of sugar in each. Pictures were shown of extensive decay, plaque and eruption model of infected baby teeth. The interpretation by one of the attendees was of paramount importance in relaying the message. Additional staff members were on site if needed.

The WIC Fluoride Varnish Program was described and fliers were distributed at the end of session to encourage attendance. [See Appendix ii] Each mother took home a dental care kit with the appropriate brochure included. Once Post-Surveys were completed, participants received \$5.00 Wal-Mart gift cards.

VIII. Outcomes:

The number of Pre-Tests completed was 9, and the number of Post-Tests completed was 10. The additional respondent had arrived late. One declined to participate in the tests. Incentives in the form of Wal-Mart gift cards were offered.

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Pre-Survey Results					Post-Survey Results		
Question #	Correct	Incorrect			Question #	Correct	Incorrect
1	6	3		How old should children be for first visit to the dentist?	1	9	1
2	8	1		If baby teeth get cavities, the permanent teeth are more likely to get cavities.	2	9	1
3	8	1		Can you infect your child with cavity-causing germs?	3	10	0
4	7	2		Can you die from a dental infection?	4	9	1
5	3	6		How long should we brush teeth for?	5	7	3
6	7	2		Drinking bottled water is always better than drinking water from the tap.	6	9	1
7	1	8		It is always best to rinse with water after brushing with a fluoride toothpaste.	7	10	0
8	4	5		If you brush in the morning, brushing at bedtime is not necessary.	8	7	3
9	8	1		Children should drink milk at bedtime.	9	10	0
10	5	4		Juice drinks labeled "100% juice" have no sugar.	10	8	2

All the answers showed improvement on the Post-Tests.

The results make it quite clear that the greatest increase in understanding after the presentation was question number 7, pertaining to the need to rinse after brushing with a fluoride toothpaste. It is encouraging to see the difference between 1 being correct on the Pre-Tests and 10 correct on the Post-Tests.

The following showed marked improvement:

- Permanent teeth are more susceptible to decay if baby teeth have decay.
- Teeth should be brushed for 2 minutes, but not necessarily 3 minutes.
- Brushing at bedtime is absolutely necessary.
- One hundred per cent of juice drinks do contain sugar.

Participants all gained a full understanding of the infectious nature of cavity-causing germs, transmitted from parent to child. It was also clear to all participants that children should not drink milk at bedtime.

Questions were encouraged at the end, and some women were surprised to learn that boiling tap water was not necessary before giving it to babies.

Concluding Remarks:

The expectant mothers are a receptive audience who are likely to learn more than adults who have school-aged children. It has been shown that the first generation to attend school brings home a great deal of knowledge to the adults in the household, whereas women expecting their first child or having only infants will not have benefited from this information.

Mothers are extremely eager to learn how best to care for their newborns. A longitudinal study would show whether or not that they apply the prevention steps learned in the information session once their new baby starts cutting her first teeth. There will certainly be a growth in collective awareness of good practices among the target population over time.

Ideally such outreach sessions should be repeated regularly two or three times per year to reach each new cohort of expectant mothers.

IX. Financial Analysis

The budget for these activities conducted and coordinated by ESAHEC was \$3000 received from the MDAC.

The first invoice for \$1500 was submitted and received. The second invoice is submitted with this report in August 2014. Activities were prepared in May, conducted in June and July and the findings written up in August 2014.

Item	Unit cost	#	Total
RDH hours Preparation and events	\$32.50	46	\$1495
RDH gas			\$32
Wal-Mart gift cards (incentives)	\$5.00	74	\$370
Veg and fruit platters for Family Night			\$180
Paper products & Washcloths for pregnant mothers			\$20
Second RDH appreciation			\$88
Project Coordinator	\$25.00	17	\$425
ESAHEC administrative costs	8%		\$210
Contribution to ChesMRC for interpretation, staff overtime, space usage			\$180
TOTAL			\$3000

The elements of the kits were covered by other funds. Their value amounted to a total of \$380. See Table below for the description of kits distributed and the value leveraged.

ITEM	UNIT COST	#	VALUE
<i>Dental kits for children</i>	<i>\$5.00</i>	<i>43</i>	<i>\$215</i>
<i>Adult kits to parents</i>	<i>\$5.00</i>	<i>22</i>	<i>\$110</i>
<i>Special kits for pregnant mothers</i>	<i>\$5.00</i>	<i>11</i>	<i>\$55</i>
		<i>TOTAL</i>	<i>\$380</i>

X. Appendix 1: Photographs



Bonnie Dove, RDH, counsels parent of young Hispanic child



Suzi Peel, Project Coordinator, prepares plates of fruit.



Jeanie Holtz, RDH, counsels pregnant mothers on the oral health of babies.

- XI. **Appendix 2:**
Spanish-language flyer prepared for outreach to women at WIC, shared as information at the Chesapeake Multicultural Resource Center session for pregnant mothers.

WIC Programa de Fluoruro



Ayuda a reducir la caries infantil con la protección del fluoruro



Early decay



Moderate decay



Advanced decay

Una higienista registrada está disponible en las oficinas de WIC proporcionar un examen dental y aplicar fluoruro para los niños de padres que reciben beneficios de WIC.

Para obtener más información póngase en contacto con su oficina de WIC:

**Caroline County WIC, 403 S. 7th Street, Denton, MD
1-866-551-2139 ♦ 410-479-8060**

**Dorchester County WIC, 7 Cedar Street, Cambridge, MD
1-866-551-2139**

**Talbot County WIC, 215 Bay Street, Easton, MD
1-866-551-2139**

**Jenni Dill, Case Manager Choptank Community Health
410-479-4306 Ext. 5038**