



Effects of an Educational and Outreach Intervention on Community Oral Health Workers

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ABSTRACT This pilot study examines caregivers' knowledge, attitudes and practices regarding their child's oral health changes after an educational intervention. Participants were 10 caregivers of children (aged 0–5). Caregivers were trained by dental students and a pediatric dental resident and were assessed prior to the start of the training course and six weeks after its completion. The project shows significant improvements in caregivers' knowledge and practices about children's oral health with a targeted and culturally competent intervention.

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Disclosure: None reported.

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Despite advances in community prevention and health care reform, disparities in oral health, dental care and access to oral health care services continue to exist.¹ Dental caries is still the No. 1 chronic infectious, yet preventable, disease in children,² and we continue to discover strong links between oral health and systemic health. A recent study by Monsarrat et al. reported more than 57 systemic conditions linked to periodontal disease.³ Children of low socioeconomic and disadvantaged backgrounds are at higher risk for developing early childhood caries (ECC).^{4,5} Significant oral disease persists within the United States and California.² The oral health of California's children is substantially worse than national objectives. Of 25 states surveyed, California ranked second lowest in children's dental health.⁶ Dental caries rates in Los Angeles County are significant and exceed statewide averages.⁷ Of children surveyed in the Los

Angeles Unified School District, 56 percent had experienced dental caries by the time they reached kindergarten.⁶ With a large proportion of the local pediatric population at extreme risk for dental disease, it is imperative that dental professionals partner with caregivers to provide early and regular preventive oral health services.

The Latino population is the largest and fastest growing minority group in California and particularly in Los Angeles County. Overall, 38 percent of the California population is Latino and of these, 14 million people (83 percent) are of Mexican origin.⁸ In Los Angeles County, 46 percent of the population identifies as Hispanic or Latino ethnicity based on the 2010 U.S. Census.⁸ According to the Centers for Disease Control and Prevention, between 2001 and 2004 Hispanic children of Mexican origin aged 2–5 had a significantly higher rate of untreated cavities than white, non-Hispanic children (29.2 percent versus 14.5 percent).¹ While not the only

step in prevention, appropriate oral health education is a critical and important factor in preventing ECC for this population.

Community health workers (CHWs) provide a range of services and play a number of roles. They assist individuals and communities in adopting healthy lifestyle behaviors. They conduct outreach within marginalized communities to implement programs that promote, maintain and improve individual and community health. They provide information on available resources, offer social support and informal counseling and help coordinate care across the health and social service sectors. CHWs can help reduce the burden of chronic diseases. They are trusted individuals who work in community settings and serve as connectors between health care consumers and providers to promote health among groups that have traditionally lacked access to care.^{9,10} Also known as *promotoras de salud* (promoters of health), they have been used in various chronic disease management programs (i.e., colorectal cancer screenings, diabetes prevention, etc.) and are effective in improving health outcomes and reducing social disparities in health.^{11,12}

Knowledge, attitudes and practices regarding children's oral health vary among caregivers. Thus, it is important for them to be properly educated with the appropriate knowledge and skills to promote health. The purpose of this pilot study was to train caregivers to become community oral health workers (COHWs) and to investigate changes in the COHWs' knowledge, attitudes and practices regarding their child's oral health after the training. We hypothesized that there would be significant increases in knowledge and positive changes in practices and attitudes of the caregivers after training compared to before training.

Methods

Participants and Community Partners

This project was conducted with two UCLA community partners, Westside Children's Center and Venice Family Clinic. Both are located in urban sections of Los Angeles County. These community partners are well-established community centers that continuously recruit new participants/patients through flyers, posters, emails, direct approach, fairs and other types of announcements. These community centers

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were the main sites used for recruiting for focus group participants as well as for the 20 caregivers (10 who became COHWs and 10 in the control group).

Westside Children's Center is located in Culver City, Calif. It provides thousands of at-risk children and their families with critical, high-quality early education programs, family-strengthening interventions for families at risk of abusing or neglecting their children, foster care and adoption services and a range of vital integrated services, such as disabilities screenings/advocacy, nutrition, parenting classes, counseling, bilingual domestic violence classes, dental and vision screenings and pediatric health consultations.

Venice Family Clinic, located in Santa Monica, Calif., provides free and

affordable health care for low-income, uninsured and homeless families and individuals. It provides a variety of health, dental and family services and is the nation's first health, wellness and integrative medicine program offered at a community clinic. A wide range of evidence-based integrated services that focus on the whole person and the whole family are provided by the clinic. UCLA residents and students rotating through Venice Family Clinic's Simms/Mann Health and Wellness Center learn an integrative approach to medical care and dental care. The Venice Family Clinic also includes an on-site, home-based Early Head Start program.

Procedure

The project lasted 12 months and was completed in three phases. All participants gave written informed consent prior to participation.

Phase One: Team Selection, Focus Group and Recruitment

Team Selection: Within the first two months of the project, 10 dental students and one first-year pediatric dental resident were selected to participate in this project. Together they conducted a literature review to start designing the oral health curriculum for the COHWs.

Focus Group: In the third month of the project, a focus group made up of community members was conducted with the aim of designing an oral health curriculum specifically tailored to the needs of the community. Bilingual recruitment flyers for the focus group were posted at the two community partner sites. Various caregivers from these sites were directly approached in the waiting rooms and invited by the project coordinator on different days to participate in the focus group. The project team accepted all eligible (any caregiver with children

aged 0–5) caregivers to participate in the focus group (no selection needed). The 90-minute focus group conducted at Westside Children's Center consisted of 12 female caregivers and was led by the pediatric dental resident who speaks English and Spanish. The majority of the caregivers were bilingual (English and Spanish) Latinas with a high school education and most were married. The focus group was guided by open-ended questions on toothbrushing habits, toothpaste usage, fluoridated water usage, dental visits, dental insurance and barriers to dental care. Focus group questionnaires and evaluation forms were entered and cleaned and descriptive statistics were calculated in Microsoft Excel. Notes and open-ended questions were examined for themes using content analysis. The focus group interview was not recorded.

Recruitment: Potential COHWs were recruited through flyers and in person with help from the project coordinator at both community sites as well as at a local Women, Children and Infants (WIC) partner site in Santa Monica. Approximately 14 female caregivers were interested. After initial contact, the caregivers were provided more details about the project and then 10 were identified as the most suitable to participate based on availability and interest. An additional group of 10 female caregivers was randomly selected from the same sites also based on availability and interest in being part of the control group.

Phase 2: Oral Health Curriculum and Training

In months four to six, through a combination of classroom lecture and discussion, the curriculum introduced COHWs to evidence-based, oral-systemic health and knowledge about the nature, prevalence and consequences of oral manifestations of chronic oral diseases

across the lifespan with an emphasis on children. The entire curriculum was kept at a sixth-grade literacy level and all materials were translated into Spanish. The dental students and the pediatric dental resident presented the courses simultaneously in English and Spanish. Child care and light refreshments were provided at all training meetings. COHWs learned their role in preventing oral disease in the community, addressing frequently encountered oral problems and promoting oral health among their peer caregivers. Regularly scheduled reflection sessions

Total training time was approximately 21 hours of which eight hours were the main didactic sessions (*italicized list*), with the remaining for mentoring.

allowed the COHWs and the project team to exchange ideas and thoughts. The COHWs were required to review a list of required course materials prior to the start of the training. These included selected online sections of the Smiles for Life curriculum,¹³ a Colgate webinar on “The Art of Perinatal and Infant Oral Health” by Francisco Ramos-Gomez, DDS, MS, MPH, (available in Spanish)¹⁴ and links to the UCLA Infant Oral Care Clinic documents.¹⁵ The learning objectives below were accomplished through 13 workshops of approximately 90 minutes each. Total training time was approximately 21 hours of which eight hours were the main didactic sessions (*italicized below*), with the remaining for mentoring. The 13 training workshops, each with several learning objectives (not listed here), were:

1. *Introduction to COHW project*
2. *Prenatal and transmission*
3. *Early childhood caries*
4. *Toothbrushing and flossing*
5. *Nutrition*
6. *Bottle use and breastfeeding*
7. *Teething and pacifiers*
8. *Healthy versus unhealthy teeth*
9. *The dental visit*
10. *Health literacy and parental advocacy*
11. *Visit to UCLA and lecture on public health dentistry*
12. *Becoming the trainer*
13. *Careers in dentistry*

Through hands-on clinical training, COHWs learned to assess a child's oral health, identified basic healthy versus abnormal oral conditions and learned to apply the concepts of a caries risk assessment.¹⁶ COHWs performed oral health screenings on their own children and children of their peers. Most clinical learning was accomplished through pictures, videos and teeth models. The hands-on learning objectives were:

- Review basic oral anatomy and characteristics of healthy versus unhealthy teeth (using many pictures, tooth models and videos).
- Understand differences between normal and abnormal findings (how to look for cavities).
- Develop awareness of particular challenges involved in dealing with special needs children such as children with autism (e.g., how to brush the teeth of an uncooperative child and where to seek dental help for special needs children).
- Perform a regular and thorough basic oral screening of infants and children by their own parents.

The control group did not receive the oral health training but were given a handout on children's oral health.

TABLE 1

Demographic Characteristics of Women in the COHW and Control Groups

	Intervention COWH (N=9)	Control (N=10)
Female	9	10
Age		
20–29	5	3
30–49	2	5
50+	2	2
Race		
White	3	1
Black	1	0
Multiracial	1	2
Other	1	7
Missing	3	0
Ethnicity		
Latino/Hispanic	5	9
Non-Latino/ non-Hispanic	4	1
Profession		
Homemaker	6	1
Full-time worker	2	4
Part-time worker	1	5
Marital status		
Married	5	5
Nonmarried	4	5

Phase 3: Conduct Workshops for the Community and Evaluation

In months seven to 11, the trained COHWs in teams of two conducted five community workshops (with a combined attendance of 55 caregivers from the community). Control group caregivers only completed the pretest, received a brochure about children's oral health, were asked to read it at their own leisure and then six weeks later completed the posttest. Control group caregivers did not conduct any community trainings.

Pretests and posttests were used to assess changes in knowledge, practices and attitudes regarding children's oral health among the COHWs and the control group. Answer choices ranged from correct/

TABLE 2

Pre- vs. Postcomparisons of Attitudes, Knowledge and Practices Within the Intervention and Within the Control Groups

		Intervention (N=9)			Control (N=10)		
	Points possible	Pre mean (SD)	Post mean (SD)	P-Value ¹	Pre mean (SD)	Post mean (SD)	P-Value ¹
Attitude ²	15	13.7	14.8	0.08	14.4	14.1	0.5
Knowledge ³	19	11.3	17.8	0.0005	11.1	13.5	0.04
Practice ³	4	3.4	3.9	0.04	3.4	3.8	0.04

¹ P-Value from paired t-test.

² Note that strongly agree=5, agree=4, neither agree or disagree=3, disagree=2 and strongly disagree=1.

³ Knowledge and practice scores based on number of correct responses.

TABLE 3

Analysis of Differences Between Intervention and Control Group Test Scores

	Intervention (N=9)	Control (N=10)	Difference	P-value
Attitudes (mean, sd)	1.1 (1.7)	-0.3 (1.3)	1.4 (1.5)	0.06
Knowledge (mean, sd)	6.4 (3.4)	2.4 (3.2)	4.0 (3.3)	0.02
Practice	0.44 (0.53)	0.40 (0.52)	0.04 (0.52)	0.86

Summary statistic represents change between pre to post (i.e., post-pre).

incorrect to strongly agree/strongly disagree and some write-in answers. The pretest was completed by the COHWs and the control group prior to the first training meeting. Posttests were completed six weeks later (after the training) by participants in the intervention and the control group.

Statistical Analysis: Data was entered into Excel and analyzed with SPSS. Summary statistics were generated to characterize the study population and comparisons of pretest and posttest results between the COHW and control groups were performed with paired t-tests and McNemar tests.

Results: The focus group centered on children's oral health issues and the open-ended questions revealed that:

- All participants reported drinking bottled water.
- Most participants reported not taking their child to the dentist because of their child's young age; others mentioned not taking their child often and currently searching for a dentist.
- One participant mentioned that they do not have dental insurance and the high cost of dental care affects their finances.

The findings from the focus group were used to modify the curriculum content and delivery style and suggested that the content needed to include:

- The importance of drinking and cooking with fluoridated tap water.
- The appropriate age for first dental visits for children and the importance of dental visits.
- Connections with available low-cost and free dental care resources in the surrounding communities.

All COHWs and the control group participants were women, and most were Latinas and bilingual in English and Spanish. The majority were between 20 and 30 years of age and all had kids aged 0–5. Most were married and homemakers. Unfortunately, one COHW failed to complete the pretest and posttest, therefore data on only nine COHWs are available. But 10 COHWs participated in the entire project (TABLE 1).

Pretest and posttest questionnaires were used to collect data from the nine COHWs and 10 control group participants. The questionnaire contained 27 items. Nineteen items were related to oral health

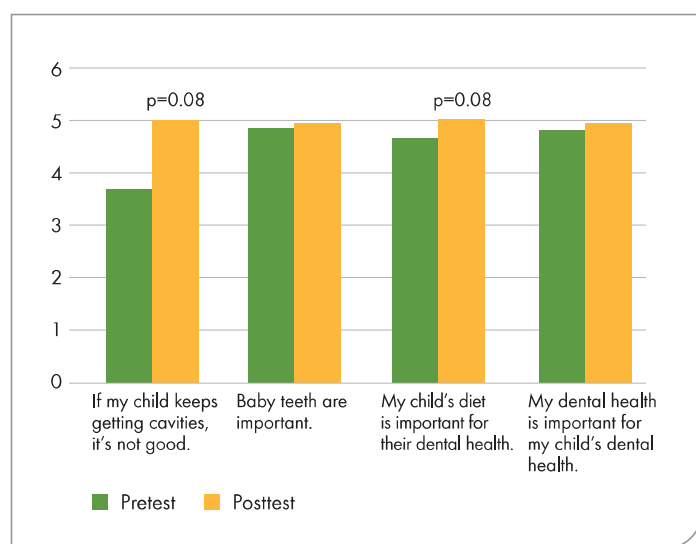


FIGURE 1. Attitude responses pretest versus posttest (N=9).

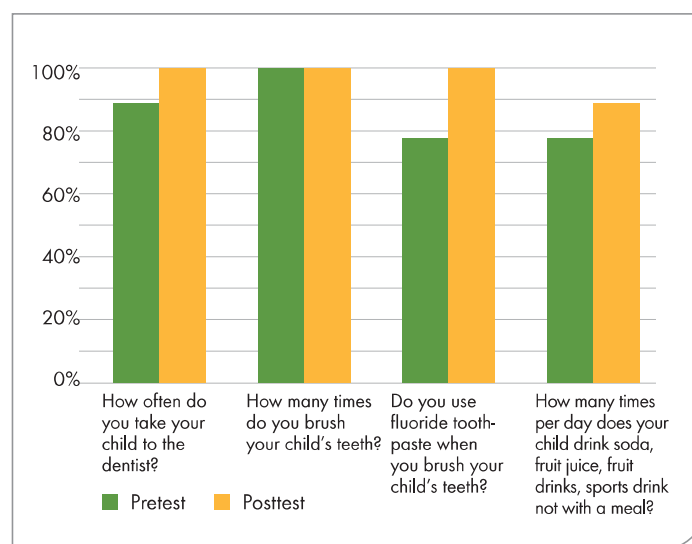


FIGURE 2. Correct practice responses pretest versus postintervention (N=9).

knowledge, four addressed the COHWs' attitudes toward children's oral health and four were related to oral health practices.

TABLE 2 summarizes the pre- versus postcomparisons of attitudes, knowledge and practices within the COHWs and separately within the controls. There was a significant increase in knowledge ($p=0.0005$) and practices ($p=0.04$) and a borderline change in attitudes ($p=0.08$) among the COHWs. The control group showed similar increases in knowledge ($p=0.04$) and practices ($p=0.04$), but the increase in knowledge for the COHWs group was comparatively larger.

TABLE 3 shows the results of comparisons of the differences between the scores of the intervention and control group between pretest and posttest. As shown, there was a significantly greater change in scores from pretest to posttest for knowledge in the COHW group than for the control group (6.4 versus 2.4, $p=0.02$).

FIGURE 1 shows the mean attitude scores on the pretest and posttest for the COHWs. Differences of borderline significance on two attitude items are shown.

FIGURE 2 shows that although there was no significance in individual practice items, positive increases in oral health practices after as compared to before intervention were found.

TABLE 4 shows comparisons of the rates of correct responses to the 19 knowledge questions for the COHWs; two individual items were significant and three were of borderline significance postintervention.

Qualitative Analysis

Participants in this project showed that their children's oral health is a high priority for low-income bilingual (English-Spanish) parents. The attendance was excellent at all 13 training and preparation workshops for the 10 COHWs, possibly due to the fact that each COHW received \$2,000 for her participation. The curriculum was perceived as highly acceptable and the COHWs genuinely seemed to enjoy their participation and their interaction with the dental students and resident. They particularly enjoyed their visits to the UCLA School of Dentistry and being able to receive a dental school tour. Some of the comments from the COHWs were, "I did not know that you could get cavities from another person," "I thought it was really important on how to detect the first signs of cavities (white spots)," and "I did not know that it was important for us to keep our health so that our kids can have good oral health." All 10 COHWs rated the initial four training workshops as extremely useful.

In a postproject survey, the 10 dental students and the one pediatric dental resident stated that they felt the COHW training curriculum was either effective or very effective. All 11 also rated it as very important to train COHWs. One commented that, "Yes, I think they (COHWs) would be a great bridge of communication between the community of patients and the dentists. The patients will more likely have a connection with the COHW than with the dentists, making it more possible for the patients to receive the information and be treated in the future." Another commented that, "Yes, I believe they (COHWs) can help bridge the cultural barrier and skepticism between some populations and the provider; they can help the provider be more aware of some cultures they are providing for and also allow for the patient to have a resource that may have more time to spend explaining and coaching through basic instruction." Nine stated that this project was useful or very useful for their own career development, and 10 out of 11 dental students and the resident stated that they would consider hiring a COHW in their future dental practices for patient education and community outreach.

TABLE 4

Rates of Correct Knowledge Responses Pre- vs. Postintervention in COHWs (N=9)

Knowledge Questions	Pre (%)	Post (%)	P-value
* = statistically significant or borderline statistically significant (P<0.05)			
1. Poor oral health has been linked to: diabetes and long-term health problems	67	78	1
2. The most common chronic childhood disease is: dental caries	67	100	0.25
*3. What causes tooth decay?	33	89	0.06
*4. Children can brush by themselves at what age?	44	100	0.07
5. Poor oral health of children has been related to: poor performance in school and social relationships	100	100	N/A
6. When should toothbrushes be replaced?	78	100	0.5
*7. Which healthy snacks does the dentist recommend?	22	100	0.02
8. Which liquids are OK to put in your child's bottle that they can sleep with?	67	89	0.63
9. Caregivers can transfer bacteria/germs that cause dental caries by: sharing utensils	78	78	1
*10. At what age can a child start using toothpaste with fluoride?	33	100	0.03
*11. Dental plaque is: food and bacteria	44	100	0.07
12. Tooth decay can be prevented with: fluoride and brushing and flossing	44	78	0.25
13. How long should a child brush their teeth for?	56	100	0.13
14. Parents should: keep their own teeth and gums healthy	56	100	0.13
15. When my child's gums are bleeding: pay attention to the gums and ask the dentist	100	89	1
16. Tap water that has fluoride: is a good source of fluoride	55	100	0.13
17. It is OK to give my baby or toddlers sweetened beverages in a sippy cup/bottle: only with meals	56	89	0.22
18. Taking children for regular dental visits: is necessary to maintain good dental health	100	89	1
19. My child's first dental visit should be: when their first tooth erupts or by age 1	55	100	0.13

Discussion

The results of this study contribute to the existing body of research on children's oral health, particularly among Hispanic families. Studies have reported that CHWs (promotoras) can be effective in community health education, outreach and screening especially for chronic diseases, better medication adherence, increased patient involvement and improvements in overall community health.¹¹ One study found an annual cost savings in using CHWs of about \$2,000 per Medicaid patient with diabetes.¹⁷ Promotoras speak the language of their communities, can address cultural misperceptions and fill the

gap where health education and health promotion are scarce. In a study by Lujan et al. to determine the effectiveness of an intervention led by promotoras on various diabetes factors among Mexican Americans, it was found that this intervention resulted in decreased hemoglobin A1C levels and other positive outcomes.¹² Furthermore, a 2010 Institute of Medicine report recommended policy and system changes to incorporate CHWs into local hypertension control programs.¹⁸ Tiwari et al. recently demonstrated that maternal oral health behaviors are a significant factor associated with early childhood caries in urban Latino children, therefore

our curriculum focused on educating caregivers about the transmissibility of dental caries and establishing a family dental home to encourage all family members to receive care.¹⁹

Increasing public awareness about the prevention of dental caries is important especially among underserved and minority populations that have less access to care, less dental insurance coverage and higher rates of risk. Because caregivers are their children's first teachers and because most children already experience dental caries by the time they enter kindergarten,⁶ it is important to educate caregivers of infants and toddlers about dental caries prevention to help reduce prevalence rates of dental caries. As with many other chronic infectious diseases, prevention is the key as dental treatment is often costly, not easily accessible and particularly risky and difficult for very young children due to behavior issues (uncooperativeness) and the possible need for pharmacological sedation.

This study showed that after the intervention, there was a significant increase in total knowledge as well as in practices and borderline significant changes in attitudes concerning children's oral health among the COHWs. Also among COHWs' scores, several individual knowledge items were significantly higher after the intervention compared to before the intervention. In the control group, there was a significant increase in knowledge as well as in practices but the increase in knowledge was larger in the intervention group.

Conclusion

As demonstrated by the success of this pilot project, we found that caregivers' knowledge and practices about children's oral health can be increased or improved with a targeted and culturally competent intervention consisting of at least an eight-hour training course.

Findings from the focus group and the subsequent revisions to the curriculum likely aided in the high acceptability of the curriculum by the COHWs. The curriculum is publicly available at the UCLA Center for Children's Oral Health website,²⁰ uccoh.org/research.html. Oral health attitudes may take longer to change or require different types of interventions. The small number of participants and the fact that caregivers may have reported that they engage in socially desirable practices rather than their actual behaviors are limitations of this study. Therefore, project evaluators recommend that a different approach and different types of questions be devised to better capture and understand the caregivers' true attitudes and practices in regards to children's oral health. Future research should include more qualitative research methodology such as a nominal group process or observations.

Future studies should include a larger participant size, longer follow-up time (six months to one year) to examine retention of knowledge and stability in change in practices and attitudes among the caregivers and evaluation of the oral health workshops given by the COHWs, including a follow-up of the attendees of those workshops. Finally, future research should also assess and follow-up the clinical outcomes of the children of the caregivers, which was beyond the scope of this project. Some of the recommendations from the COHWs were to include more information on how to help adults who had mental health issues with their oral health, the need for more time/opportunities to practice their newly obtained presentation skills before going to the community and more training in public speaking.

The dental students and the resident noted that the majority of the COHWs were willing to learn more about oral

health and that their children's oral health was very important to them. Important topics to include for future projects are the prevention of early childhood caries, including the significance of the daily consumption of fluoridated tap water, how to detect early forms of caries and the early establishment of dental homes for all family members. One final positive outcome of this project was that several of the COHWs showed interest in pursuing careers in dentistry. ■

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REFERENCES

1. National Center For Health Statistics CfDcCaP Untreated Dental Caries (Cavities) in Children Ages 2–19, United States, by Sex, Race and Hispanic Origin, and Percent of Poverty Level, United States. Online: Centers for Disease Control and Prevention 2011. www.cdc.gov/features/dsuntreatedcavitieskids. Accessed May 11, 2017.
2. U.S. Department of Health and Human Services. *Oral Health in America: A Report of the Surgeon General*. Rockville, Md.: National Institute of Dental and Craniofacial Research, National Institutes of Health; 2000.
3. Monsarrat P, Blaizot A, Kemoun P, et al. Clinical research activity in periodontal medicine: A systematic mapping of trial registers. *J Clin Periodontol* 2016;43(5):390–400.
4. Edelstein BL. Disparities in oral health and access to care: Findings of national surveys. *Ambul Pediatr* 2002;2(2 Suppl):141–7.
5. California Dental Association Foundation, American College of Obstetricians and Gynecologists, District IX. Oral health during pregnancy and early childhood: Evidence-based guidelines for health professionals. *J Calif Dent Assoc* 2010;38(6):391–403, 05–40.
6. Dental Health Foundation. "Mommy, It Hurts To Chew" The California Smile Survey. An Oral Health Assessment of California's Kindergarten and Third-Grade Children. 2006.
7. Network CP-EH. Taking a Bite out of Oral Health Inequities: Promoting Equitable Oral Health Policies for Communities of Color. Online: California Pan-Ethnic Health Network; 2016.
8. United States Census 2010. www.census.gov/2010census/popmap/index.php. Accessed April 6, 2017.
9. Garcia RI, Cadoret CA, Henshaw M. Multicultural issues in oral health. *Dent Clin North Am* 2008;52(2):319–32, vi.
10. Glover J CS. A Community Framework for Addressing Social Determinants of Oral Health for Low-Income Populations: CHCS: Center for Health Care Strategies Inc.; 2017.
11. Moralez EA, Rao SP, Livaudais JC, Thompson B.

- Improving knowledge and screening for colorectal cancer among Hispanics: Overcoming barriers through a promotor-led home-based educational intervention. *J Cancer Educ* 2012;27(3):533–9. doi: 10.1007/s13187-012-0357-9
12. Lujan J, Ostwald SK, Ortiz M. Promotora diabetes intervention for Mexican Americans. *Diabetes Educ* 2007;33(4):660–70.
13. Smiles for Life. A National Oral Health Curriculum. Online: Society of Teachers of Family Medicine 2011. www.smilesforlifeoralhealth.org. Accessed May 9, 2017.
14. Ramos-Gomez F. UCLA Strategic Partnership for Interprofessional Collaborative Education in Pediatric Dentistry (SPICE-PD). Online: 2017. www.udchatpd.org. Accessed May 9, 2017.
15. Ramos-Gomez F. UCLA Infant Oral Care Program. Los Angeles: 2017. www.uclaiocp.org. Accessed May 9, 2017.
16. Ramos-Gomez F, Ng MW. Into the future: Keeping healthy teeth caries free: Pediatric CAMBRA protocols. *J Calif Dent Assoc* 2011;39(10):723–33.
17. Martinez J, Knickman JR. Community Health Workers: A Critical Link for Improving Health Outcomes and Promoting Cost-Effective Care in the Era of Health Reform. New York: NYS Health Foundation; 2010.
18. Medicine Io. A Population-Based Policy and Systems Change Approach to Prevent and Control Hypertension. Washington, D.C.: Institute of Medicine (U.S.) Committee on Public Health Priorities to Reduce and Control Hypertension; 2010.
19. Tiwari T, Wilson AR, Mulvihill M, Rai N, Albino J. Maternal Factors Associated With Early Childhood Caries in Urban Latino Children. *JDR Clin Trans Res* 2017;2380084417718175.
20. UCLA Center for Children's Oral Health. Online: 2017. www.uccoh.org. Accessed Oct. 30, 2017.

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