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# Oral Health Literacy Framework: The Pathway to Improved Oral Health

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## ABSTRACT

**Background:** Oral health literacy (OHL) is the degree to which a patient receives, gains, processes and understands basic oral health knowledge, the services available to them and the behaviors required of them to make healthy decisions.

**Types of studies reviewed:** Studies reviewed focused on oral health disparities, barriers to OHL and patient-provider communication, parental engagement and factors contributing to the improvement of OHL for vulnerable communities.

**Results:** The consequences of low OHL are far reaching and compounded by disparities that already exist for patients and communities on multiple levels. This article discusses barriers to OHL, the impact of OHL on oral health and oral health disparities and recommendations for improving patient OHL.

**Practical implications:** The article provides a proposed conceptual framework that discusses the potential mechanism of upstream and intermediate factors impacting OHL and how OHL affects oral health outcomes.

**Keywords:** Oral health literacy, oral health equity, oral health education, parental engagement, oral health disparities

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Disparities in children's oral health continue to persist across the United States and are influenced by factors including race, ethnicity and socioeconomic status. According to the American Dental Association, the prevalence of untreated dental caries in children ages 5 to 9 from 2011–2014 was 23.9% in Mexican American children and 22.9% in non-Hispanic Black children, significantly higher than the prevalence of 16.2% in non-Hispanic white children.[1] Disparities also exist in dental care utilization for children according to race; in 2017–2018, the percentages of children who had visited the dentist in the past year was 42.6% for Black children, 45.4% for Asian children, 46.9% for Hispanic children and 55.5% for white children.[2]

In Los Angeles County alone, tooth decay continues to be more prevalent among children from socioeconomically disadvantaged and Spanish-speaking households as well as among children from Asian, Black/African American and Latinx backgrounds.[3] According to the Smile Survey 2020, roughly 2 out

of 3 disadvantaged children in Los Angeles experience dental decay with more than 1 out of 5 experiencing untreated decay, significantly higher than the 1 in 3 nondisadvantaged children who experience decay and 1 in 7 who experience untreated decay. Language also played a role in oral health disparities; in households where Spanish was the primary language, the likelihood of tooth decay was 70% compared to 47% in primarily English-speaking households. This disparity implies that children from Spanish-speaking homes have more limited access to preventive services and behaviors than their English-speaking peers.[3] These disparities underline the need for oral health to be framed as a matter of social justice, human rights and health equity.

Recent research has found correlations between oral health disparities and oral health literacy levels, highlighting the necessity for oral health care providers to educate patients and families at an appropriate literacy level.[4] The consequences of low oral health literacy (OHL) are far reaching and compounded by disparities that already exist and affect patients on multiple levels.[5–9] Over the past 20 years, research has shown that low OHL contributes to poor oral health, such as periodontal disease, tooth decay and missing teeth,[10,11] as well as missed preventive dental appointments and minimally invasive treatment options.[12]

In order to ensure that all patients, regardless of race, background or socioeconomic status, have access to quality oral health care and education, oral health literacy strategies must be improved and implemented nationwide.

## OHL

The World Health Organization (WHO) defines health literacy as "the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health."[13] Based on this definition, OHL can be defined as the extent to which a patient is motivated and able to gain, understand and use basic oral health knowledge, the services available to them and the behaviors required of them to make healthy decisions. Because the patient is the best manager of their own health, OHL must be patient-focused. Additionally, information must be presented to the patient at a level and in a format and language they can understand. If a patient cannot understand the information that is being shared with them, it is impossible for that individual to benefit from it.

> The consequences of low OHL are far reaching and compounded by disparities that already exist.

In the realm of pediatric dentistry, parents' OHL takes on a crucial role. Because the patient is a child, their oral health is entirely dependent on the parent's or caregiver's level of OHL. Because pediatric patients depend on parents and caregivers for good oral health and behaviors, family oral health education is a key piece of OHL. Family oral health education (FOHE) is oral health education that focuses not only on the child, but the entire family. Family education on topics like the importance of pediatric oral health, behaviors necessary to protect oral health and prevent oral disease and the role of pediatric oral health in overall health throughout the life course, can increase OHL by improving families' understanding of oral health. The potential impacts are far reaching, resulting in healthier habits at home, prevention of the chronic disease early childhood caries (ECC) and cavity-free futures for children regardless of socioeconomic status, race or background.

In its 2020 publication "Healthy People 2030," the U.S. Department of Health and Human Services Office of Disease Control and Prevention identified two levels of health literacy.[14] Personal health literacy looks at the understanding of individuals and their knowledge of oral health as it enables them to make healthy decisions for both themselves and others. Organizational health literacy is "the degree to which organizations equitably enable individuals to find, understand and use information and services to inform health-related decisions and actions for themselves and others."[1] When it comes to advocating for pediatric oral health, both levels of OHL are critical.

In order for oral health education to be effective, it is necessary that the education materials be culturally and linguistically appropriate and accessible.[15] By prioritizing OHL, health care professionals can pave the way to oral health equity as a matter of social justice and human rights.[2] As such, pediatric dental and medical providers have a responsibility to ensure that oral health education remains accessible to patients from all backgrounds and populations. This includes ensuring their practices and office environments are culturally competent, advocating for policies that advance social justice and health equity and engaging community leaders to join the fight against oral health disparities.[16] The Centers for Disease Control and Prevention (CDC) defines cultural competence as "a set

TABLE 1

**Summary of Key Factors Impacting Oral Health Literacy (OHL)**

| Types of Factors | Definition | Examples |
|---|---|---|
| Upstream factors | Factors that influence at the broadest level | • Maternal education, personal education, participation in education and training<br>• Social context of communities, economic hardships, racial bias |
| Intermediate factors | Factors that influence individuals and communities closely | • Cultural: cultural values, help-seeking beliefs, community engagement<br>• Linguistic: language spoken at home, understanding of health care services and available health information<br>• Acculturation: community values, community engagement, social support |

of congruent behaviors, attitudes and policies that come together in a system, agency or among professionals that enables effective work in cross-cultural situations," adding that organizations that promote cultural competence value diversity, self-evaluate their environment, learn and apply cultural knowledge and adapt to diversity in their communities.[17]

## Barriers to OHL

Patient-provider communication is a key barrier to OHL. Patient-provider communication is impacted on both sides; patients with low OHL skills may struggle to describe dental problems or concerns to their dental providers, while providers' efforts to describe or explain dental conditions may not be fully understood. In a study of dental providers in California that examined communication techniques, participants referenced multiple barriers to patient-provider communication. When asked what barriers existed, providers cited patients' inability to follow recommended oral health practices, patients' lack of understanding of oral health information, language and cultural barriers between patients and providers, patients' lack of interest/prioritization in their own oral health, limitations in provider training/clinical practice and a lack of OHL communication training and proficiency requirements in professional schools/continuing education.[4] These answers indicated that providers are in need of further training on OHL principles and techniques in order to best serve and reach their patients. However, the answers also conveyed a tendency for providers to shift responsibility for communication onto patients rather than examining ways they can take responsibility themselves and adapt their practices and communication styles to be more appropriate and accessible, both culturally and linguistically.

In the same study, dental providers reported needing help communicating with the following specific disadvantaged patient populations:[4]

- Patients with limited English proficiency (LEP) (65%).
- People with cognitive disabilities (54%).
- Older adults (42%).
- People with limited education (35%).
- The deaf or hard of hearing (31%).
- Early childhood age groups (31%).

Patients with LEP experience the greatest oral health communication barriers for a multitude of reasons.[4] They face frequent challenges due to cultural differences and language barriers, and these challenges impact information input and output when it comes to patient-provider communication. These obstacles to effective communication are often compounded by the cultural differences that tend to accompany language barriers as well as the failure of many dental practices to adequately use translation or interpretation services. This highlights a need for oral health materials and dental environments that are culturally and linguistically appropriate for all patients, regardless of language, culture or background.[4]

According to the National Hispanic Council on Aging, nonnative English speakers are more likely to have low health literacy than native English speakers, and immigrants are more likely to have difficulty navigating the U.S. health care and insurance systems. These disparities are further exacerbated by the linguistic and cultural barriers that face immigrant and nonnative English-speaking populations.[14] This is demonstrated by the fact that 41% of Latino adults lack basic health literacy, and only 4% have the necessary level of health literacy proficiency to make informed health decisions.[18]

## The OHL Framework

The conceptual framework illustrated in **FIGURE 1** and summarized in **TABLE 1** provides a potential mechanism of upstream and intermediate factors impacting OHL and how OHL affects oral health outcomes.

## Upstream Factors

### *(Factors that influence at the broadest level)*

OHL is strongly associated with upstream factors such as race/ethnicity, educational attainment, social-economic factors, geographic location and immigrant status of the population. Complex factors such as maternal education, personal education and participation in education and training were found to contribute to health literacy. OHL represents an interaction between personal capacity and social and environmental factors that impact the health-related actions and behaviors of individuals.[19] Thus, the social context of the communities, economic hardships and racial bias plays a role in how individuals and communities gain OHL and increase their capacity to use it

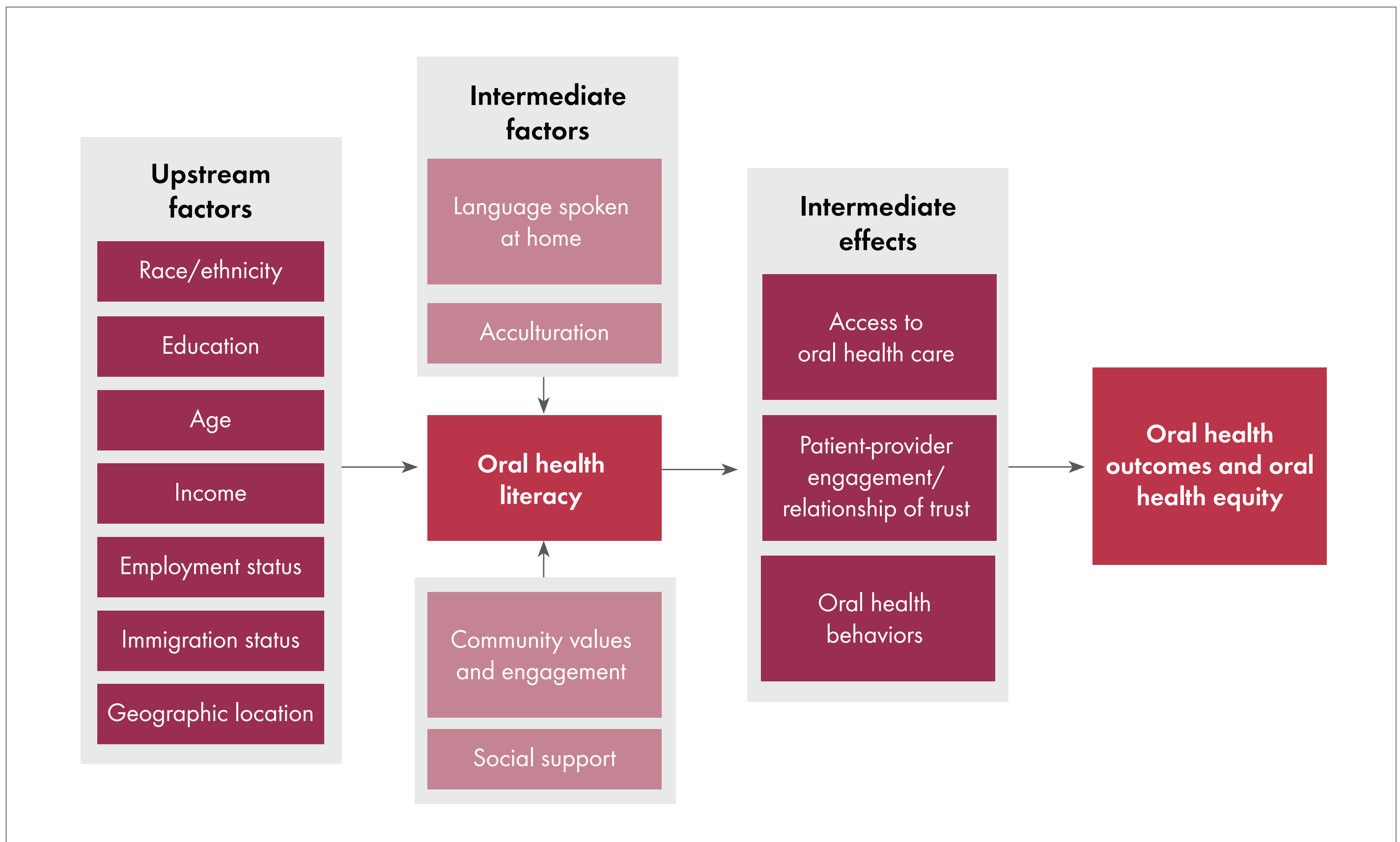


**FIGURE.** Pathways between oral health literacy and oral health outcomes (modified from Ju et al.).[68]

to improve access to care, patient-provider communication and oral health behaviors.

## Intermediate Factors
*(Factors that influence the individuals and communities closely)*

Culture and language spoken at home are important factors impacting immigrant populations and OHL. Cultural factors should go beyond the language barriers and include a broader appreciation of cultural values, help-seeking beliefs and community engagement — all these factors play a role in enhancing OHL. Linguistic barriers can impact OHL through less understanding of health care services, including health information that is available to them.[20] Studies show that children of Latino parents who do not speak English at home and face linguistic challenges while attending dental visits have poorer oral health outcomes, including higher dental caries, fewer preventive visits and fewer dental sealants than the general U.S. population.[21–23]

Recent literature shows links between acculturation, OHL and oral health outcomes.[24] Acculturation is a process by which individuals adopt the values and behaviors from another culture, affecting their lifestyle and beliefs.[25,26] Acculturation impacts the ability of an individual to navigate the dental health care system. Lower acculturation can increase language barriers that can lead to poor OHL.[27] For example, language proficiency within immigrant communities was one of the most influential factors impacting visits to the dentist and adhering to recommended behaviors.[28] It has also been reported that higher language proficiency was associated with higher OHL, improved oral health knowledge, enhanced oral hygiene practices and increased utilization of preventive dental services.[28,29]

Acculturation influences Latino children's oral health through parental oral health knowledge and OHL. It has been shown that more acculturated Latino parents had better OHL, perceived fewer barriers in seeking care and promoted better oral health behaviors — such as brushing teeth twice daily — for their children compared to Latino parents who were less acculturated. Additionally, it has been shown that more acculturated Latino parents had higher socioeconomic status, reported better overall health and were more likely to have dental insurance compared to less acculturated Latino parents.[30] These studies demonstrate the interconnectedness of upstream and intermediate variables and their impact on OHL and Latino communities.[30]

Community values and engagement are essential components to be recognized in terms of OHL, especially in minority and immigrant communities. For

example, Latino communities value interdependence and have perceived norms related to oral health prevention that can impact OHL and dental care utilization.[31] Social and cultural factors such as collective attitudes and behaviors related to oral health with a Latino community can act as enabling factors or barriers to gaining OHL.[32] In addition, Latino communities have close relationships with family and community — these values of familism and generational living with multiple caregivers are common practices in Latino families and immigrant communities and are important factors to take into consideration in terms of OHL and associated oral health outcomes for children.[33]

Social support is another important factor associated with OHL, especially for immigrant groups. Social support from close groups, family, extended kin and friends contributes to individuals obtaining relevant health-related information and making informed medical decisions. In the Latino community, which is often family centered with strong social support networks, higher social support is associated with higher OHL and better oral health outcomes.[31,34]

## Intermediate Effects

### *Access to Oral Health Care*

Individuals with limited OHL may avoid or delay seeking care because they may not fully understand the value of preventive treatments or may not understand the signs and symptoms of diseases. Additionally, individuals may fear their limited OHL will be exposed in a clinical setting, causing them to feel shame or embarrassment.[35] As a result, individuals may avoid seeking care.[35,36]

Language proficiency and OHL play a part in navigating the health system. Individuals with poor OHL may face additional challenges navigating the complex U.S. health and insurance systems. Many individuals are eligible but not enrolled in programs such as Medicaid, and not all states include an oral health benefit in Medicaid. The complexity and lack of understanding of benefits may be a heightened barrier for individuals with limited health literacy. Additionally, people with limited language proficiency and OHL have reported difficulty locating health facilities and following instructions. These factors heighten challenges for individuals with poor language proficiency and OHL in accessing oral health services.

> Implementing medical and dental integrated models can provide streamlined care for people with poor OHL.

Implementing medical and dental integrated models can provide streamlined care for people with poor OHL. Integrated models of care have been shown to close care gaps for some of the most vulnerable populations in our country by bringing multiple silos of care together in one place.[37]

### *Patient-Provider Engagement/ Relationship of Trust*

OHL plays an integral part in building trust between the patient and the provider. Limited OHL has been associated with greater distrust of providers, pessimism about treatment and lower care satisfaction.[38] Trust is critical in any patient-provider relationship because it is known to affect health outcomes, improve health status and increase patients' satisfaction,[39–41] thereby improving patients' usage of available health services and the extent to which they follow care guidelines.[38] While many factors impact patients' levels of trust in their provider, the provider's communication skills, mutual understanding and caring attitude appear to be closely connected to patient trust.[41,42] This indicates that the ability of dental professionals to communicate with their patients' health literacy is directly linked to improved health outcomes, guiding and informing patients' ability to implement appropriate oral health care and make decisions that benefit their health overall.[43] In fact, as Horowitz and Kleinman note in comparisons of health literacy definitions, what all definitions have in common is an expression of the idea that by improving people's access to health information and their ability to appropriately use it, overall health outcomes would improve.[43]

It is critical for patients, especially those with low OHL, to clearly understand instructions, follow recommendations and feel comfortable asking questions. When these key aspects are lacking, it can contribute to poor patient-provider engagements and lead to miscommunication. Additionally, poor OHL can make it challenging for providers to educate on the importance of prevention or adhering to good oral health behaviors. Often, patients receive an abundance of oral health information but are rarely evaluated for comprehension.[44–46]

Therefore, it is crucial for oral health providers to recognize literacy challenges for their patients. One way to address this challenge is to ensure dental professionals are trained to provide culturally competent care and communicate with their patients in a linguistically appropriate way to assess

TABLE 2

**Summary of Intermediate Effects of Oral Health Literacy (OHL)**

| Intermediate Effect | Summary |
|---|---|
| Access to oral health care | Individuals with low OHL may:<br>• Avoid or delay seeking care.<br>• Fear exposure of limited OHL resulting in shame or embarrassment.[35]<br>• Face additional challenges navigating the U.S. health and insurance systems.<br>• Have difficulty locating health facilities and following instructions. |
| Patient-provider engagement/ relationship of trust | Low OHL is associated with:<br>• Greater distrust of providers.<br>• Pessimism about treatment.<br>• Lower care satisfaction.[38]<br>• Poor patient-provider engagements.<br>• Increased miscommunication.<br>• Challenges in oral health education. |
| Oral health behaviors | Low OHL is associated with:<br>• Low knowledge of good oral health behaviors.[50]<br>• Low confidence of parents to care for their child's oral health.<br>• More perceived barriers to accessing care.<br>• Fewer perceived benefits of preventive dental visits.[50–53] |
| Role in oral health inequities | OHL levels influence:<br>• Oral health care delivery.<br>• Individual's knowledge, behaviors and capacity for health-related decisions.<br>• Access to meaningful information about oral health for vulnerable populations.<br>• Access to preventive services to vulnerable populations. |

their comprehension of the information they are receiving. Providing culturally competent care can improve patient-provider trust and communication. Because patients with limited health literacy receive less primary prevention, it is vital for providers to invest in building a strong relationship with their patients while in the office.[47] Cultural competency training is provided as a part of predoctoral training within most dental schools and continuing professional development.[48] However, more training opportunities for the dental workforce are needed in regard to providing care to a diverse population.[49]

### *Oral Health Behaviors*

OHL and oral health behaviors are closely associated. Lower OHL is associated with lower knowledge regarding recommended oral hygiene and diet-related behaviors.[50] Parents who have low OHL exhibit lower confidence that they can take care of their children's teeth. In addition, they perceive more barriers to accessing care and fewer benefits of preventive dental visits.[50–53]

### *Role of Oral Health Literacy in Oral Health Inequities*

Improving OHL will indirectly have a beneficial effect on reducing oral health inequities.[19] OHL influences several aspects of oral health, including oral health care delivery, and the individual's knowledge, behaviors and capacity for health-related decisions. For example, improved OHL could improve patient access to preventive services, increase patients' trust in the provider and help motivate patients to adhere to recommended oral health behaviors, which may ultimately reduce oral health inequities. For vulnerable groups, such as the Latino population and other immigrant groups, low OHL impacts access to meaningful information about oral health issues and access to preventive services, which may contribute to the deterioration in health status and lead to oral health inequities.

The intermediate effects of OHL are summarized in **TABLE 2**.

## Next Steps

Research has shown that patients' oral health is impacted by their OHL levels and, where the pediatric population is concerned, the OHL level of parents and caregivers.[4] Consequently, steps must be taken to address low OHL levels in patients and families in order to improve patient-provider communication and increase oral health overall. The following steps are recommended moving forward as strategies to increase the OHL of families and improve children's oral health and are summarized in **TABLE 3**.

## Promoting Oral Health Education and Counseling

Studies have shown that improved patient-dentist communication is a critical step in improving the population's oral health.[54,55] With this in mind, promoting oral health education that is culturally and linguistically appropriate is a key step in improving OHL. Furthermore, improved OHL through oral health education has the potential to impact big-picture issues including policy, education and public health-related reform and solutions.[16] Essential aspects of oral health education include the following:

### *Caries Risk Assessments*

A caries risk assessment is an essential component in the decision-making process of dental providers for the appropriate prevention and management of dental caries.[56] Multiple caries risk assessment forms and algorithm-based programs based on a combination of scientific evidence and expert opinion are available to providers to help guide practitioners in assigning risk status based on a variety

TABLE 3

**Summary of Next Steps for Improving Oral Health Literacy (OHL)**

| Next Step | Summary | Includes |
|---|---|---|
| Promoting oral health education and counseling | Patients' oral health is impacted by their OHL levels and, for children, the OHL levels of their parents or caregivers.[4] Steps must be taken to address low OHL levels in patients and families in order to improve patient-provider communication and increase oral health overall. | • Caries risk assessments.<br>• Self-management goals.<br>• Anticipatory guidance.<br>• Motivational interviewing.<br>• Open-ended questions, Affirmations, Reflective listening, Summaries (OARS).<br>• The six-step infant oral care visit.<br>• TeleOral health education and health promotion. |
| Training for providers | Ensuring that dental providers and their teams are effectively trained in OHL communication techniques is a priority when it comes to research and effective OHL practices. | • Culturally and linguistically appropriate resources.<br>• Effective communication.<br>• Patient-friendly health care environments. |
| Community oral health workers (COHWs) or promotoras | COHWs or promotoras are layperson health educators who can serve as a bridge between families and providers and help facilitate culturally and linguistically appropriate care. | • Provide connections to dental homes and referrals to providers.[67]<br>• Assist in scheduling appointments.[67]<br>• Follow up with families.[67]<br>• Help families navigate the health care system.<br>• Provide oral health education in the family's preferred language and with cultural sensitivity. |
| Interprofessional collaboration | Oral health education can be provided by both medical and dental providers.[15] | • Remind parents of the importance of parental engagement in their child's oral health.<br>• Remind expecting parents that a child's oral health starts prenatally and from infancy.<br>• Stress the importance of preventive dental care.<br>• Promote healthy habits and behavior change. |
| Prioritization of the age 1 visit | All children should receive an oral health exam upon the eruption of their first tooth or by age 1. | • Assessment of child's risk level and proactive preventive care.<br>• Opportunity to offer appropriate education to parents using OHL strategies. |

of clinical and social factors.[57] Once risk status is identified, providers can direct more intensive preventive care to those patients who are at high risk for caries.

### *Self-Management Goals*

Self-management goals are used to guide parents or caregivers to commit to manageable goals related to their child's oral health habits and behaviors in the home. Self-management goals contribute to behavior change that has the potential to improve both the child's oral health and their caries risk level.

### *Anticipatory Guidance*

Through anticipatory guidance, health providers counsel parents about the development of their child's health. Anticipatory guidance is perhaps one of the most effective methods of ECC prevention in that it proactively educates parents about their child's oral development and behaviors to implement at home in order to keep their teeth healthy and caries free. Providers are encouraged to use the teach-back method to ensure the parent/caregiver comprehends what is being suggested.

### *Motivational Interviewing*

Providers can use motivational interviewing as a means of connecting with families and providing oral health education. Motivational interviewing should be incorporated into conversations surrounding caries risk assessment and self-management goals. A variety of toolkits and resources exist to assist providers in providing effective motivational interviewing, including the Association of State and Territorial Dental Directors early childhood committee's list of motivational interviewing resources[58] and the updated Your Ultimate Motivational Interviewing Toolkit, available at PositivePsychology.com.[59]

### OARS

Throughout the entire oral health education process, providers are encouraged to remember the acronym OARS, which stands for open-ended questions, affirmations, reflective listening and summaries. By employing the OARS technique, providers ensure that parents are given an opportunity to share their concerns and perspectives, that they feel affirmed and supported, that they feel listened to and understood

and that they leave the conversation having understood the information and instructions that were conveyed to them. When implemented correctly, OARS supports and promotes effective OHL practices and culturally appropriate care.

### *The Six-Step Infant Oral Care Visit*

An infant oral care visit is made up of six steps: caries risk assessment, knee-to-knee exam, toothbrushing prophylaxis, clinical exam, fluoride varnish treatment and anticipatory guidance, counseling and self-management goals. In the context of the six-step infant oral care visit, patient and caregiver education should take place both during the caries risk assessment and at the end of the visit.

### *Teleoral Health Education and Health Promotion*

Teledentistry or teleoral health will be an essential tool in delivering oral health education and health promotion. One of the benefits of teledentistry is it can provide health care providers with insight into the lives of their patients by bringing the dental practice into patients' homes and is increasingly being used to promote patient-provider relationships that build trust, cultural competency and continuity of care across the patient's lifetime.[60] However, the development of protocols and cultural competency training is needed for providers to deliver oral health promotion in a telehealth setting. Telehealth as a format of health care is well suited to many encouraged communication practices including agenda-setting, plain language usage, avoiding overloading patients with information and using the teach-back method.[61,62] Telehealth also has the potential to improve communication between patients and providers by reducing anxieties often connected to visiting health care facilities, which may otherwise interfere with attention to and retention of information.[62] The increased use of telehealth may improve access to care specifically for individuals from lower-income communities who tend to face obstacles to health care such as transportation to health care facilities, conflicts with work schedules or the demands of caregiving responsibilities.[62]

It is important to note that providers can still implement strategies for clear communication when providing services over a telehealth platform. According to Coleman, these strategies include using health literacy universal precautions (precautions that minimize risk for all patients through how health care is structured),[63] utilizing professional medical interpreters for patients with LEP, establishing an agenda at the beginning of the encounter, using plain language, avoiding unnecessary medical jargon, being careful not to overload patients with information, repeating and/or summarizing key information, utilizing visual aids and written summaries in order to accommodate multiple learning styles, asking open-ended questions and using teach-back.[61,62]

Providers can still implement strategies for clear communication when providing services over a telehealth platform.

## Training for Providers

Ensuring that dental providers and their teams are effectively trained in OHL communication techniques is now considered a priority when it comes to research and developing effective OHL practices.[18] Among current strategies, the following health literacy intervention strategies have shown positive results in medical settings[64,65] and should be incorporated into provider OHL training:

- **Resources** — Train providers to provide resources that are in the patient's or caregiver's preferred language and at their designated literacy level, making it easy for patients to learn from and implement the information. Providing patients with resources that are culturally and linguistically appropriate is necessary when disseminating oral health information. Providers are encouraged to have oral health pamphlets and other materials available in multiple languages according to the demographics of the community.[66] Pamphlets should include information on accessing dental care and should provide resources and information on finding affordable dental insurance.[66] Additionally, dentists can partner with schools and community-based organizations outside of their dental practice as a means of increasing OHL on dietary behaviors and oral hygiene.[15,66]
- **Communication** — Ensure that health providers and staff receive the necessary training on how to communicate effectively with all patients, regardless of their language, culture, background or health literacy level.
- **Environment** — Equip providers to foster health care environments that are "patient friendly" and "shame-free," ensuring that patients feel comfortable,

welcome and free to ask questions without fear of judgment.[65]

### Community Oral Health Workers or Promotoras

Community oral health workers (COHWs) or promotoras (lay-person health educators in the Hispanic/Latino community) can serve as a bridge between families and providers and help to facilitate culturally and linguistically appropriate care. Research of a promotoras-led oral health promotion workshop in an underserved primarily Hispanic/Latino community showed notable improvements in the oral health-related knowledge and beliefs of caregivers participating in the workshop.[67] Thus, including COHWs as part of the dental team has many potential benefits. Through in-person interaction with families, COHWs can provide connections to dental homes and referrals to providers.[67] They can assist in scheduling appointments and follow up with families to ensure that children are receiving the care they need at home.[67] By helping families navigate the health care system and providing oral health education in the family's preferred language and with cultural sensitivity, COHWs are in a prime position to improve OHL within their community.

### Interprofessional Collaboration

In order to maximize oral health education for parents and caregivers, it is important to remember that education can be provided by both medical and dental providers.[15] Dentists and primary care providers should remind parents and caregivers of the importance of parental engagement when it comes to their child's oral health. They can remind expecting parents that a child's oral health starts prenatally and from infancy throughout childhood and can stress the importance of preventive dental care. Additionally, they can promote healthy habits and behavior change that will benefit the child's oral health from a young age.

### Prioritization of the Age 1 Visit

The importance of oral health education and OHL emphasizes just how critical the age 1 visit is for every child's oral health. All children should receive an oral health exam upon the eruption of their first tooth or by age 1. In addition to allowing dental providers to assess the child's risk level and take proactive steps to stop caries before they begin, the age 1 visit also allows providers to offer appropriate education to parents using OHL strategies, equipping both caregiver and child to keep the infant's healthy teeth caries free throughout the life course.

To progress toward "oral health equity," OHL, patient engagement and oral health education must play a central role.

### Conclusion

If we are aiming to progress toward "oral health equity" on a cavity-free future for patients from all backgrounds and races, OHL, patient engagement and oral health education must play a central role. Oral health cannot be positioned as a matter of social justice, health equity and human rights if patients are unable to gain, process and understand oral health, available oral health services and healthy oral health behaviors. Providers and patients can work together to overcome barriers to OHL by understanding the patient-provider relationship of trust and engagement. Furthermore, dental and medical providers are well-positioned to support patients and their families in the context of the upstream and intermediate factors affecting them, thanks in part to the increased utilization of teleoral health, which has the potential to help decrease barriers in access to oral health care while enabling oral health care providers to continue to utilize strategies for clear communication with their patients.

Through more sensitivity, understanding, improved provider training skills and effective dissemination of resources, interprofessional providers can work together to increase oral health education, patient engagement and OHL interaction to advocate and promote transformative policies such as the age 1 visit and establishing a dental home for the child and the families. As such, health professionals can pave the way for improved access to care, the patient-provider relationship and addressing oral health behaviors on diet, nutrition and appropriate individual "patient-centered" guided home care as a way to improve oral health and well-being as we move into the future. ■

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