

Monographs

Migrant Health Issues

Dental / Oral Health Services

by

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DENTAL / ORAL HEALTH SERVICES

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GINA R. LOMBARDI

According to an analysis of migrant health center encounter data, dental disease ranks as one of the top five health problems for farmworkers aged 5 through 29, and remains among the top twenty health problems for farmworkers of all other ages presenting for care. For children aged 10 to 19, dental disease is the chief complaint (Dever, 1991). Over the last eighteen years, numerous local-level studies of the oral health of farmworker children and adults have been conducted. Across both time and geography, the findings consistently show farmworkers of all ages to have a level of oral health far worse than what is found in the general population (Koday, Rosenstein, and Lopez, 1990; Entwistle and Swanson, 1989; Woolfolk, Hamard, Bagramian, and Sgan-Cohen, 1984; Woolfolk, Sgan-Cohen, Bagramian, and Gunn, 1985; Cipes and Castaldi, n.d.). The poor level of oral health for farmworkers was generally found to correspond with lack of access to information that could help prevent oral health problems and lack of access to preventive care and restorative services.

Over the last two decades, the prevalence of dental decay has declined significantly in the general population. This is largely attributed to the success of preventive practices, such as fluoridation of water, improved oral hygiene, and the application of sealants to the teeth of children, in order to protect teeth from decay. This improvement is not reflected in the oral health of farmworker children who experience a rate of dental decay that is approximately twice that of children in the general population (Koday, et al., 1990).

Of 231 adult Hispanic migrant and seasonal farmworkers who participated in a 1986 study in

Colorado, 22% had never seen a dentist, and 56% had not received regular dental care. Eighty-five percent indicated that they were in need of dental care at the time of the survey, and the same percentage was found to have one or more decayed teeth. Comparing these data to the Hispanic National Health and Nutrition Examination Survey (NHANES), the farmworkers appeared to exhibit more advanced periodontal disease than other Hispanic groups. Crisis care for emergencies was identified as the typical approach to seeking oral health care. Most participants noted that they would seek care for a variety of oral health symptoms; however, in practice, few actually did so. The factors identified as barriers to accessing care were cost, time factors and perceptions that diagnosis and treatment would be ineffective (Entwistle and Swanson, 1989).

More recently, in 1999, the California Agricultural Worker Health Survey (a population-based study of California farmworkers) revealed that poor dental outcomes persist among farmworkers. In a clinical assessment of 652 adult workers, the study documented that 33.5% showed evidence of at least one untreated decayed tooth (Villarejo, Lighthall, Williams, Souter, Mines, Bade, Samuels and McCurdy, 2000). Thirty percent of male subjects and 37.5% of females presented missing or broken teeth at the time of the physical examination. Gingivitis was the third major dental problem, affecting 14.4% of total subjects. Rates of untreated dental caries, missing teeth, and gingivitis are indicative of a continual inability to access preventive oral health services among this population. The lack of access to care and even inadequate knowledge of how to maintain oral health were shown in utilization rates for 971 workers who completed the main survey instrument. Of these subjects,

49.5% of males and 44.4% of females reported that they had never been to a dentist. As evidenced by subjects' reports of toothaches that lasted up to one year, meeting basic needs for farmworkers often means compromising oral health.

A study in Michigan interviewed farmworker mothers and examined children seeking services from a program coordinated by the University of Michigan to provide oral health care to farmworkers. The study found the percentage of teeth with decayed surfaces for migrant children ages 5-14 in the study group was 65% vs. 16% for U.S. schoolchildren of the same age, and the percentage of teeth with filled surfaces was 29% for migrant children compared with 76% for U.S. schoolchildren. The high percentage of decayed teeth combined with a low level of restorative care and indications of oral hygiene neglect lead to the conclusion that the oral health needs of this highly mobile population are not being met adequately and should receive greater attention.

Most of the families in the Michigan study had permanent homes in Texas and were only in Michigan for part of the agricultural season. However, most of the mothers interviewed reported that the care provided by the University of Michigan was the main source of dental care for their children. Through the rest of the year treatment would only be sought for emergencies (Woolfolk, et al., 1984; Woolfolk et al., 1985).

The Centers for Disease Control and Prevention (CDC) coined the umbrella phrase Early Childhood Caries (ECC) for the many patterns of dental decay in primary dentition (i.e., baby teeth). The effects of ECC are both immediate and far-reaching. ECC can cause severe pain, infection, abscesses, chewing difficulty, malnutrition, and gastro-intestinal disorders and can also lead to poor speech articulation and low self-esteem. ECC is particularly prevalent in children from low-income families, for whom the cost of dental care is prohibitive (Ramos-Gomez, Tomar, Ellison, Artiga, Sintes, and Vicuna, 1999). ECC has been found to negatively impact learning potential and academic performance of children because pain interferes with their ability to concentrate, and in severe cases to maintain nutrition. Without insurance benefits, many farmworker children are left without care and continue to suffer the pain and irreversible progression of

dental disease (Good, 1992).

Studies focusing on Baby Bottle Tooth Decay (BBTD), a particular type of ECC, found high rates of decay among farmworker children. BBTD is a disease of young children, characterized by a distinctive pattern of severe tooth decay in the primary dentition. BBTD has been associated with the practice of lulling babies to sleep with a bottle of milk or sweet liquid. The practice allows liquid to pool in the mouth, which can promote decay. Treatment of severe BBTD, especially for children less than 2½ years of age, requires physical restraint, sedation or general anesthesia, and sometimes hospitalization, it can be very expensive. The prevalence of BBTD in the general population is 5% or less, while among disadvantaged urban children it was found to be 20%. In a study of 125 farmworker children under the age of 4 in Yakima, Washington, published in 1992, 29.6% of the children had BBTD (Weinstein, Domoto, Wohlers, and Koday, 1992). This rate is almost 30% higher than that found in populations of urban poor and 5 times higher than that of the general population.

One of the reasons for the broad disparity between the oral health of farmworkers and that of the rest of the population is that farmworkers typically do not seek care unless they have an oral health emergency (Entwistle and Swanson, 1989). Preventive applications and health education to promote prevention are not part of emergency care. Most oral health prevention education is conducted during the course of visits to the dentist for check-ups and cleanings. In other words, prevention is put into practice through the delivery of care that farmworkers usually do not receive.

Such findings have prompted researchers in the area to ask why, after more than a quarter of a century of federal funding for oral health care for farmworkers, their oral health status remains so poor. The simple answer is that the federal funding provided has not been sufficient to create an adequate number of access points for farmworkers to obtain affordable oral health services. In addition, some of the access points that have been created are not funded at a level that makes it possible for them to provide comprehensive oral health services (i.e., health education or cleaning services may be available, but the clinic may not have

a dentist) (National Migrant Resource Program, 1990). Those migrant health centers that have managed to establish dental programs that provide comprehensive care often have long waiting lists because there is such heavy demand for their service. The need for farmworker families to relocate for employment means that they may have to move out of the service area before they can benefit from available programs. This caused one researcher to note that farmworker children may be screened, but often do not receive comprehensive oral health treatment after their needs have been determined (Cipes and Castaldi, n.d.).

Access alone is not enough. The health care provider must be able to understand farmworkers' language, as well as the cultural assumptions and practical circumstances that influence their worldview and the actions they choose to take. Cultural and linguistic competence on the part of health care providers is essential in encouraging farmworkers to seek healthcare when they need it and in helping them understand and implement preventive measures to improve their own health and that of their families.

The case of BBTD illustrates the importance of having healthcare providers who are culturally and linguistically competent to work with farmworkers. It also highlights the importance of assuring that health care providers working with farmworkers have an understanding of the essential circumstances created by the culture of agricultural labor. The recommended practice to prevent baby bottle tooth decay is to give the baby only water in the bottle, or preferably, to wean the child from the bottle completely. It is often assumed by practitioners that parents fully understand that the benefit to the long-term health of the child will offset the days or weeks of crying of an angry baby not willing to give up the bottle. It is important here to have an understanding that practical necessity and cultural expectations may make it either impractical or undesirable for families to comply with the advice of the health care practitioner.

The incidence of BBTD in poor families has been associated with the fact that working parents are exhausted at the end of the day. In the case of farmworker women, it has been documented that they

usually have primary responsibility for household tasks and childcare following a full day of hard physical labor in the fields (Rodriguez, 1993). Allowing babies to fall asleep with the comfort of milk or sweet juice in the bottle makes it possible for the parents to attend to other needs. Although early weaning is socially acceptable and desirable in Anglo culture, other cultures do not view it as an acceptable child rearing practice. Thus, working poor Hispanic farmworker parents may feel guilt at the prospect of weaning their child at what is perceived to be an early time. Living in overcrowded housing and labor camps, they may also be unwilling, or from a practical standpoint, unable to engage in a practice that could cause the infant to cry through the night and prevent household members and neighbors from sleeping.

The BBTD study concluded that the lack of access to care resulted in farmworker dental visits once every 2.8 years. This resulted in low levels of knowledge, or as the author put it "low dental IQ," underscoring the need both for oral health education for farmworkers and culturally acceptable alternatives to risk behaviors (Weinstein, et al., 1992).

When migrant health centers are able to provide comprehensive dental services in adequately staffed clinics, a positive health outcome has been documented in at least one study. In 1988, the Yakima Valley Farmworkers Clinic in Yakima, Washington maintained a dental clinic staffed with five dentists to serve farmworkers in a three county area. The clinic provided direct patient care and also organized a community prevention program. In a report authored by the clinic's dental director, the ability of the clinic to staff the dental program was due in large part to the assignment of National Health Service Corps (NHSC) dentists. The NHSC is a valuable mechanism for recruiting healthcare professionals to migrant health care. For decades, many of the 121 Migrant Health Center grantees have had to depend on the placement of health care professionals assigned to them by the NHSC in order to maintain an adequate clinical staff. One of the main reasons for this dependency is that many migrant health centers are located in rural areas where it is difficult to pay salaries that are competitive with those offered in urban locations. A benefit of

NHSC assignments is that they encourage the choice of primary care as a career focus over specialty care which is generally more lucrative for the health care professional.

The Yakima Valley study examined 216 Hispanic children who were all members of migrant farmworker families. Although the children evidenced a much higher rate of decay than children in the general population, the farmworker children in this study also had higher rates of filled teeth and teeth protected by sealants than children in the general population. The inference was that the availability of access to affordable restorative services and prevention in the form of sealants was having a positive health impact on the children in the Yakima Valley Farmworkers Clinic service area (Koday, et al., 1990).

It is important to note that farmworkers do not choose to forego dental care. When affordable care is made available during hours when families can attend, in locations they can reach, and with providers with whom they can communicate, they will seek it. This is evidenced in the findings at Yakima as well as those in Michigan, where families from distant homebase areas obtained care at upstream clinics (Koday, et al., 1990; Woolfolk, et al., 1984; Woolfolk, et al., 1985). Far from being noncompliant, farmworker families will literally go to great lengths to obtain health care.

Involving students through their academic institutions in programs to serve farmworkers can have the dual benefit of promoting migrant health as a career option and giving students practical training in cultural competency and health care delivery to underserved populations. An example of this is the program implemented in 1990 by the Colorado Migrant Health Program. Local dentists, dental school students, and recent graduates participated in program that placed

the students in the offices of dental preceptors in order to augment rural dental manpower during the high-impact agricultural season.

Another successful approach to coordinated services was implemented by the Children's Dental Project of Santa Cruz County, California. The concept for the project was developed by a Clinical Nurse Specialist who coordinated collaboration between the county health department, local dentists, the dental hygiene department of the local community college, and the county's maternal and child and adolescent health advisory board to address the oral health problems of farmworker and other low-income children. Coordinating available community services made it possible for families to gain access to quality care at a price they could afford (Ramos-Gomez, et al., 1999).

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Copies may be obtained through the following sources:

*National Center for Farmworker Health, Inc., Buda TX
Phone: (512) 312-2700
<http://www.ncfh.org>*

*Migrant Health Branch, Bethesda, MD
Bureau of Primary Health Care
Phone: (301) 594-4300
<http://bphc.hrsa.gov/migrant/>*

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