

Dental Services for Migrant and Seasonal Farmworkers in US Community/Migrant Health Centers

Sherri M. Lukes, RDH, MS;¹ and Bret Simon, PhD²

ABSTRACT: *Context:* Migrant and seasonal farmworkers are recognized as a medically underserved population, yet little information on need, access, and services is available—particularly with regard to oral health care. *Purpose:* This study describes the facilities, services, staffing, and patient characteristics of US dental clinics serving migrant and seasonal farmworkers, and identifies trends and issues that may impede or improve dental care access and service. *Methods:* National databases were used to identify community and migrant health centers providing oral health care to migrant and seasonal farmworkers. Mailed surveys collected information on clinic history, operational details, services provided, patient demographics, employment and resource needs, and perceived barriers to care. *Findings:* Among the 81 respondents (response rate 41%), hours of operation varied from 1 evening a week to more than 40 hours a week; 52% had no evening hours. Almost all the clinics offered preventive, diagnostic, and basic restorative dental services, and roughly two thirds also offered complex restorative services. Patients most frequently sought emergency dental care (44%) followed by basic restorative services (32%) and preventive services (26%). The dentist position was the most difficult to fill, and new funding sources were cited as the most important resource need. Respondents perceived cost of services, lack of transportation, and limited clinic hours as primary barriers to care. *Conclusions:* While some barriers to care have been almost universally addressed (eg, language), there is evidence that some impediments remain and may present significant obstacles to a broad improvement in oral health care for migrant and seasonal farmworkers.

consistently identifies several barriers to care: income, mobility, language, and transportation are the most common.^{1,4,6-8,10} *Healthy People 2010*, the prevention agenda for the nation, notes that rates of periodontal disease are higher among migrant and seasonal farmworkers.¹³ In *Rural Healthy People 2010*, a companion document to *Healthy People 2010*, state organizations, rural health clinics, and local public health agencies ranked oral health a surprising fifth in a priority ranking of the 28 focus areas included in *Healthy People 2010*.¹⁴

Oral health care for migrant and seasonal farmworkers is most often provided by community or migrant health centers,¹⁵ as seeking care from private practitioners is usually cost prohibitive. In spite of the recent Community Health Center expansion initiative,¹⁶ health centers continue to struggle with funding and other access issues that negatively impact oral health services for this population. The purpose of this study was to describe the practice characteristics of dental clinics in the United States that serve migrant and seasonal farmworkers and consider the impact some of these variables may have upon access to dental care.

Methods

This was a descriptive study utilizing both paper and electronic versions of a survey developed by the researchers. The respondents provided self-report responses to questions in 3 areas: utilization of dental

Although oral health data on migrant and seasonal farmworkers is scarce, a number of studies have indicated that these farmworkers suffer disproportionately higher rates of dental disease when compared to the general population.¹⁻¹² The literature

¹Dental Hygiene Program, College of Applied Sciences and Arts, Southern Illinois University, Carbondale, Ill.

²College of Applied Sciences and Arts, Southern Illinois University, Carbondale, Ill.

For further information, contact: Sherri M. Lukes, RDH, MS, Associate Professor of Dental Hygiene, HCP-CASA, MC 6615, Southern Illinois University, Carbondale, IL 62901; e-mail smlukes@siu.edu.

services, patient population characteristics, and description of clinic facilities and services. Development of the survey followed an extensive review of the literature as well as personal experience with migrant and seasonal farmworkers dental services at a local clinic. The first draft of the survey was sent to 10 migrant health clinicians and administrators nationwide for review. Recommendations were reviewed and incorporated into the final version of the survey. The final version contained 31 items. The survey and data collection methods were reviewed and approved by the Southern Illinois University institutional review board.

The list of survey candidates was compiled from databases provided by 3 organizations or agencies that represent migrant and seasonal farmworker clinics throughout the country: the Bureau of Primary Health Care, Migrant Clinicians Network, and Migrant Health Promotion. Our intent was to survey every clinic that provided migrant and seasonal farmworker dental care (census survey); however, the data provided by these organizations did not provide the information needed to directly determine this criterion. The Bureau of Primary Health Care provided a list of all health center grantees, listing the main site and whether dental services were available, but did not indicate which of the satellite clinics provided dental services. The Migrant Clinicians Network directory included a listing of all health centers and satellite clinics, but again it did not specify which sites contained dental clinics. Migrant Health Promotion published a directory that did designate which satellites contained dental clinics, but only for the midwest region. In most cases, therefore, it was necessary to contact the main site to determine which, if any, of the satellite clinics provided dental care. This process resulted in a master list of 225 community/migrant health centers providing dental care to migrant and seasonal farmworkers. Each of these clinics was contacted by telephone to verify the clinic address and determine, for addressing purposes, the person at the health center most qualified to complete the survey. Surveys and cover letters describing the research were mailed in late June 2003. Nonrespondents were given phone call reminders and, for convenience and timeliness, offered paper or electronic (Internet) versions of the survey. Data collection ceased in January 2004. Data were analyzed using SAS version 9.1 (SAS Institute, Cary, NC).

Results

Of the 225 surveys mailed, 27 were deleted from the population because of duplicate mailings, undeliverable as addressed, or the clinic reported that

they did not provide dental services to migrant and seasonal farmworkers. An additional 7 surveys were removed due to significant missing data. Our final sample was 81, representing 40.9% of the population. The response rate was 46.9%, 45.5%, and 34.6% for the east, midwest, and western regions respectively, suggesting that there was no response bias based on geography. Most surveys were completed by the dental director (usually a dentist), but some were completed by other health center staff including chief executive officers, dental hygienists, and migrant program directors. Those completing the surveys had worked at the clinics an average of 6.7 years (range 31; SD 6.8).

Table 1 categorizes findings that influence access to care.

Dental clinics had been open for less than 1 year to 33 years (1970-2003). The modal response was 2 years, and one third ($n = 27$) had been open only since 2000. More than half (52%) were open no evenings. We asked respondents to provide the number of migrant and seasonal farmworker visits for 2002, but reporting problems and low response made results for this variable unreliable. When asked about staffing needs, dentists were identified as the position most difficult to staff by 53% of respondents, with dental hygienists and dental assistants about equal at 19% and 20%, respectively. Funding, either through existing or new sources, was identified as the most important resource need by 70% of

Table 1. Characteristics of Community/Migrant Health Centers Providing Oral Health Care to Migrant and Seasonal Farmworkers*

	% (n)
Facilitators to care	
Open all year	98.8 (80)
Treat both adults and children	98.8 (80)
Bilingual staff available for translation	96.3 (77)
Migrant Headstart linkage	87.0 (67)
Use outreach workers	68.8 (55)
Early childhood caries screening program	65.8 (52)
School-based linkage for migrant and seasonal farmworkers' children	57.1 (44)
Open 2 or more evenings per week	32.1 (26)
Use case managers	30.0 (24)
Use Promotoras	23.8 (19)
Open Saturday or Sunday	13.6 (11)
Barriers to care	
Additional funding largest need	70.0 (57)
Difficulty in staffing dentists	53.0 (43)
Open no evenings	51.8 (42)

*Self-report of health center respondents (N = 81).

respondents. Additional clinic space was identified as the most important resource need by another 24%, with the remainder divided among additional dental equipment and updated dental equipment.

We asked how long patients must wait, on average, for routine and emergency care. For routine care, patients could wait anywhere from 1 day to 6 months (mean = 27 days). For emergency care, the average wait was less than 2 days but could be as long as 24 days. Payment for services results showed most patients paid for at least a portion of their care: 53.5% sliding fee scale, 13.1% state-funded uninsured program, and 7.7% full fee for service. Clinics were asked about their perceptions of barriers to care for migrant and seasonal farmworkers and ranked a list of the 6 barriers most commonly reported in the literature. The barriers, ranked from most significant to least significant, included cost to patient and lack of transportation (equal ranking), lack of knowledge about the clinic, limited clinic hours, fear of dental work, and language.

We asked what percentage of their migrant and seasonal farmworker patients were believed to speak Spanish only. For this variable, responses ranged from 10% to 100%, with the mean response equal to 67.4% (SD = 25.6). Nearly all clinics (96%) reported having bilingual staff. We asked clinics to report the relative frequency with which patients sought care for 3 types of dental service: preventive, basic restorative, and emergency care. The mean responses were 44.3% for emergency care, 32.2% for basic restorative care, and 26.2% for preventive care.

Discussion

Clinics reported that migrant and seasonal farmworkers sought care most for acute problems (44%), followed by restorative services (32%), and preventive services (26%). This result is the inverse of what one would hope to find. Preventive services—routine cleanings and screenings—can address and remedy oral health problems before they become costly and irreversible. The question that this raises is whether the utilization pattern is due to a lack of knowledge, lack of concern for dental conditions, limited clinic operating hours, or some combination of variables. Cost is always a factor as well; most migrant and seasonal farmworkers' income is below the federal poverty level.^{12,17}

The dentist was by far the most difficult staff position to fill (53%) which is consistent with trends in dentistry.^{1,18} With such limited funding, health centers have difficulty employing dentists at all, much less during evening hours, translating into an access barrier for migrant and seasonal farmworkers. The declining

dentist to population ratio nationwide and a geographic maldistribution of providers compound the problem.^{1,18,19} In rural and/or underserved areas where most community/migrant health centers are located, the ratio is 40 dentists per 100,000 residents, compared to 60 per 100,000 in urban areas.^{1,14,16} When ranking barriers to care from most to least significant, health center respondents ranked cost, lack of transportation, lack of knowledge about the health center, and limited clinic hours as more significant barriers than language. One must be mindful, however, that barriers as perceived by the health centers may be different from those perceived by the migrant and seasonal farmworkers. These barriers could be reduced by greater use of the promotora (lay health worker), which is most often a trusted member of the population.²⁰

Conclusion

Dental care for minority and underserved populations represents a significant and largely unaddressed problem. Data for migrant and seasonal farmworkers are notably scarce, but the few studies that do exist confirm a largely unmet need. Though the low response rate was a limitation of the study, this survey of migrant and seasonal farmworker dental clinics found evidence of both barriers and facilitators to oral health care for this population. In our view, limited clinic hours, coupled with cost and transportation issues, represent the most significant barriers to care for this population and are likely reasons acute care is sought more than preventive or restorative. We believe that addressing these issues in migrant farmworker oral health care would provide the greatest improvement in overall oral health. More research is needed from the perspective of both the patient and health care provider.

References

1. US Department of Health and Human Services. *Oral Health in America: A Report of the Surgeon General*. Rockville, Md.: US Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health; 2000.
2. Call RL, Entwistle B, Swanson T. Dental caries in permanent teeth in children of migrant farmworkers. *Am J Public Health*. 1987;77:1002-1003.
3. Dever GE. *Migrant Health Status: Profile of a Population With Complex Health Problems*. Austin, Tex; 1991. Migrant Clinicians Network; Migrant Clinicians Network Monograph Series.
4. Domoto P, Weinstein P, Leroux B, Koday M, Ogura S, Iatridi-Roberson I. White spots caries in Mexican-American toddlers and parental preference for various strategies. *J Dent Child*. 1994;61:342-346.
5. Koday M, Rosenstein DI, Lopez GM. Dental decay rates among children of migrant workers in Yakima, WA. *Public Health Rep*. 1990;105:530-533.

6. Leon E. *The Health Condition of Migrant Farmworkers* (ED 406 074). Lansing, Mich; Michigan State Department of Education; 1996.
7. Lombardi G. *Migrant Health Issues: Dental/Oral Health Services*. Buda, Tex: National Center for Farmworker Health; 2001. Migrant Health Monograph Series (1).
8. Lukes SM, Miller FY. Oral health issues among migrant farmworkers. *J Dent Hyg.* 2002;76(II):134-140.
9. Nurko C, Aponte-Merced L, Bradley EL, Fox L. Dental caries prevalence and dental health care of Mexican-American workers' children. *J Dent Child.* 1998;65:65-72.
10. Waldman HB. Invisible children: the children of migrant farmworkers. *J Dent Child.* 1994;61:218-221.
11. Weinstein P, Domoto P, Wohlers K, Koday M. Mexican-American parents with children at risk for baby bottle tooth decay: pilot study at a migrant farmworkers clinic. *J Dent Child.* 1992;59: 376-383.
12. Hanson E, Donohoe M. Health issues of migrant and seasonal farmworkers. *J Health Care Poor Underserved.* 2003;14(2):153-164.
13. US Department of Health and Human Services. *Healthy People 2010* (conference edition, in two volumes). Washington, DC: US Dept of Health and Human Services; 2000.
14. Texas A&M University System Health Science Center, School of Rural Public Health, Southwest Rural Health Research Center. *Rural Healthy People 2010: A Companion Document to Healthy People 2010*. Vol. 1. College Station, Tex: Texas A&M University System Health Science Center; 2003.
15. Burt BA, Eklund SA. *Dentistry, Dental Practice and the Community*. 5th ed. Philadelphia, Pa: WB Saunders, Co.; 1999.
16. Ryan J. *Improving Oral Health: Promise and Prospects. Background Paper of the National Health Policy Forum*. Washington, DC: George Washington University; 2003.
17. Slesinger DP. Health status and needs of migrant farmworkers in the United States: a literature review. *J Rural Health.* 1992;8:227-236.
18. Mouradian WE, Schaad DC, Kim S, et al. Addressing disparities in children's oral health: a dental-medical partnership to training family practice residents. *J Dent Educ.* 2003;67:886-895.
19. Haden NK, Catalanotto FA, Alexander CJ, et al. Improving the oral health status of all Americans: roles and responsibilities of academic dental institutions. *J Dent Educ.* 2003;67:563-583.
20. Booker VK, Robinson JG, Kay BJ, Najera LG, Stewart G. Participation in a lay health promotion program. *Health Educ Behav.* 1997;24:452-464.